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Division of Agricultural Sciences

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CALIFORNIA PEAR INDUSTRY

Economic Situation, 1961

Part I: Interpretation of Trends

Part II: Statistical Supplement

Jerry Foytik

CALIFORNIA AGRICULTURAL EXPERIMENT STATION
GIANNINI FOUNDATION OF AGRICULTURAL ECONOMICS

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the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 12.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office of National Statistics 2000).

There is a growing awareness of the need to address the needs of older people in the community. The Department of Health (1999) has published a strategy for older people, which sets out a vision for the future of older people's health and care. The strategy is based on the following principles: older people should be able to live independently in their own homes; older people should be able to access the services they need; older people should be able to participate in the decisions that affect their lives; and older people should be able to live in a safe and secure environment.

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FOREWORD

Information about certain economic aspects of producing and marketing California pears is brought together here. The study is in two parts. Part I indicates what changes have occurred in past decades, why they took place, and how the major factors behind the shifts can assist in making projections of patterns for the immediate future. Part II presents the detailed statistical data utilized as a basis for preparing Part I.

This study is part of the work being carried on by the California Agricultural Experiment Station, University of California, to examine the probable economic effects of the pear decline disease. It serves two purposes: to record and interpret past trends and to provide the background descriptive information required for forecasting future shifts and for undertaking studies of specific problems.

Sources for most of the data used are the California Crop and Livestock Reporting Service, the California Federal-State Market News Service, the Agricultural Marketing Service (USDA), the California Tree Fruit Agreement, The Canners League of California, and the National Canners Association. The author wishes to thank personnel in the California Crop and Livestock Reporting Service who made certain unpublished county data available as a supplement to published materials and to acknowledge the assistance of University of California staff members who provided help in interpreting the material. Of course, the author accepts final responsibility for any errors of fact or interpretation.



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*The first table of this set gives the data indicated for all California pears. The following tables give similar data on a varietal basis.

the 1990s, the number of people in the world who are under 15 years of age has increased from 1.1 billion to 1.5 billion, and the number of people aged 65 and over has increased from 0.2 billion to 0.5 billion (United Nations 1999).

There are a number of reasons why the world population is ageing. First, the number of people who survive to old age has increased. In 1950, the life expectancy at birth was 47 years for men and 51 years for women. By 1995, life expectancy at birth had increased to 71 years for men and 76 years for women (United Nations 1999). Second, the number of people who survive to old age has increased. In 1950, the number of people aged 65 and over was 0.2 billion. By 1995, the number of people aged 65 and over had increased to 0.5 billion (United Nations 1999).

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CALIFORNIA PEAR INDUSTRY: ECONOMIC SITUATION, 1961
Part I: Interpretation of Trends

by
Jerry Foytik^{1/}

INTRODUCTION

Pear decline reached serious proportions in the Pacific Northwest during the past decade. It first appeared in California in 1959. Over 150,000 California pear trees were killed in 1960 and an even larger number in 1961. Much remains unknown about this disease, which may have far-reaching effects on the pear industry and on the economy in some areas of the state.

Predictions about future prospects for the pear industry will be difficult to make until answers are available to such basic questions as:

1. At what rate will pear decline spread in the future?
2. How successful will research be in developing means for curing and rejuvenating affected trees?
3. What steps will growers take to replace abandoned trees?

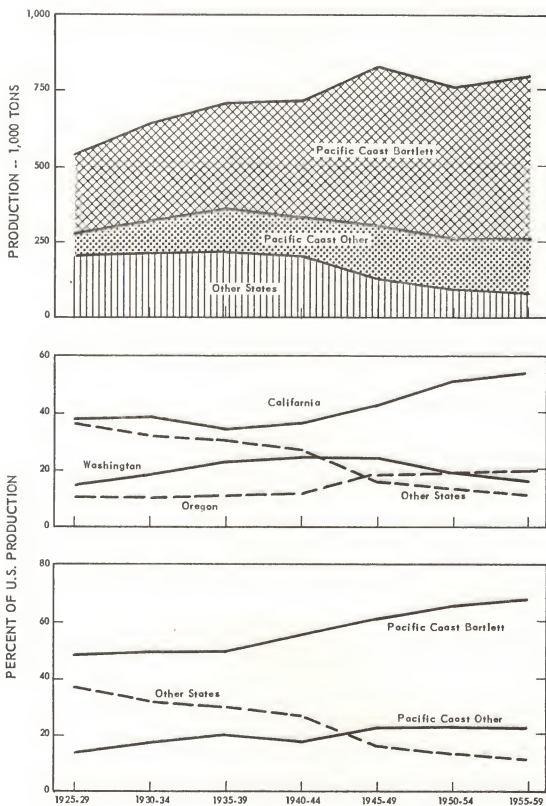
Yet pear growers, handlers, and processors must plan their future operations. This report provides the basis required for making these decisions. It examines factors responsible for past shifts and present trends in the pear industry and uses this evaluation in making tentative forecasts. Attention is focused chiefly on (a) production and its two determinants, acreage and yield, and on (b) farm marketings.

The interpretative comments are supplemented extensively by charts and summary tables indicating major trends and relationships. Source references in this report (Part I) are to tables in "Part II: Statistical Supplement." Part II also presents other supporting data.

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Figure 1

Pears: Composition of U. S. Production, 1925-59



Based on tables 44, 45 and 46.

THE PEAR INDUSTRY

The pear is one of California's important fruit crops. It ranks second among deciduous tree fruits (following peaches) in production and third (following peaches and prunes) in acreage and farm value.

California's Position

In this country pears are grown extensively in about 25 states and on a more limited scale in several others where the fruit is used on the farm or sold at local markets. Production, however, is heavily concentrated in a few states. California, the leading state, produces half of the nation's commercial crop. Oregon and Washington contribute 36 percent; Michigan and New York, 5 percent; and all other states, 7 percent.

The relative importance of the various states has changed (see Figure 1). The major shift was an expansion in California (from 36 percent of the total in 1925-44 to 52 percent in 1950-59) and about an equal decline in non-Pacific Coast states (from 32 to 12 percent). The combined production in Oregon and Washington increased only slightly (from 32 to 36 percent).

Bartlett pears, the major variety grown along the Pacific Coast, represent about 90 percent of the pear crop in California, 70 percent in Washington, and 40 percent in Oregon. Thus California accounts for about three-fourths of the Bartletts and one-fourth of the other pears produced in these three states.

Pears from the major producing states are utilized in significantly different ways (see Table I). Canning accounts for 70 percent of commercial sales in California, 53 percent in Washington, 25 percent in Oregon, and 32 percent in other states. Practically all the remainder is shipped for fresh consumption. California accounts for one-third of the pears sold for fresh use and almost three-fourths of those processed.

California's fresh pears, because they mature earlier, are marketed before supplies from other states become heavy. The situation is different, however, for canned pears. Supplies from California are sold in direct competition with pears packed in other states.

Table I

U. S. Pear Production and Utilization, 1950-59 Average

Use	California	Oregon	Washington	Other states	U. S. total	Percent in California
	1,000 fresh tons					percent
Shipped fresh	101.5	93.5	52.4	45.7	293.1	34.6
Canned ^{a/}	254.5	31.5	64.6	21.0	371.6	68.1
Other ^{a/}	9.5	1.9	4.7	0	16.1	59.1
Total sales	365.5	126.9	121.7	66.7	680.8	53.7
Farm use	1.2	3.7	3.1	22.4	30.4	3.9
Not utilized	1.5	1.5	.7	.3	4.0	37.8
Total crop	368.2	132.1	125.5	89.4	715.2	51.5
% of U. S.	51.5	18.5	17.5	12.5		
	percent of sales					
Shipped fresh	27.8	73.7	43.1	68.5	43.1	
Canned ^{a/}	69.6	24.8	53.1	31.5	54.6	
Other ^{a/}	2.6	1.5	3.8	0	2.3	

^{a/} Mostly for drying in California and Washington and for crushing in Oregon and "Other states."

Source: Based on Tables 44, 45, and 46.

Table II

California Pear Acreage in 1960

District	Bartlett pears	Other pears	All pears	All pears
	acres--bearing and nonbearing		percent	
North Bay	12,320	60	12,380	26.6
Santa Clara	6,170	2,560	8,730	18.7
Central	9,960	370	10,330	22.2
Mountain	9,630	690	10,320	22.2
Marysville	2,000	180	2,180	4.7
Other areas	2,320	310	2,630	5.6
Total	42,400	4,170	46,570	100.0

Source: Based on Table 21.

Producing Areas in the State

Pears can be grown under a variety of climatic, soil, and cultural conditions. However, economic factors and cultural requirements have limited commercial production in California mainly to a few specialized areas where pears can be grown most profitably. Eight counties in the central part of the state include 80 percent of the acreage. By adding nearby counties with smaller acreages to these production centers, we cover the territory included in the principal districts listed below. Marysville is made a separate district because this area includes half of the remaining acreage and accounts for a large portion of the fresh Bartlett pears shipped from the state. Table II gives present acreage.

PEAR PRODUCTION DISTRICTS

As used in this report, production districts are defined to include the counties listed below in descending order of present acreage. These districts are not identical to the CTFA (California Tree Fruit Agreement) districts established under the federal marketing order applicable to fresh interstate shipments of California Bartlett pears. They do, however, correspond closely to groups of adjacent CTFA districts.

North Bay District includes five counties north of San Francisco: Lake, Mendocino, Sonoma, Napa, and Marin. This district corresponds approximately to the fruit-growing areas of the three CTFA districts of Lake, North Bay, and North Coast.

Santa Clara District is composed of six counties southeast of San Francisco: Santa Clara, Santa Cruz, San Benito, San Mateo, Alameda, and Monterey. It is identical to the Santa Clara district for CTFA.

Central District includes four counties near the mouth of the Sacramento River: Sacramento, Solano, Contra Costa, and Yolo. It comprises CTFA districts of Contra. Costa, Sacramento River, and Solano.

Mountain District contains Placer, El Dorado, and Nevada counties, and corresponds to CTFA districts of Colfax, El Dorado, and Placer.

Marysville District includes Yuba, Sutter, and Butte counties. It is identical to the Central Sacramento Valley district of CTFA except that Sierra County (which has no commercial pear acreage) is excluded.

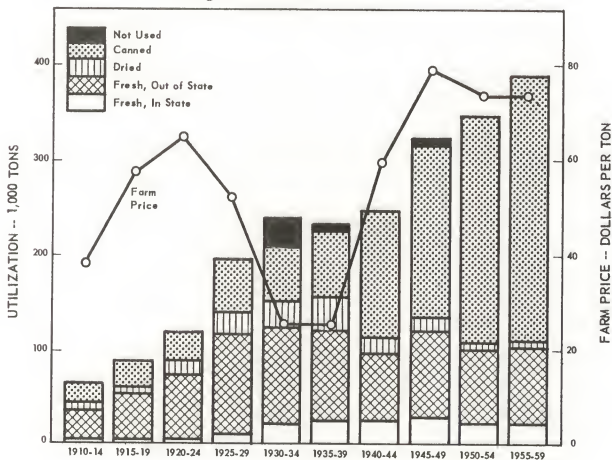
Other Areas include the other 37 counties of the state. Eleven of these have no commercial acreage, 17 have limited plantings of less than 25 acres each, and nine have acreages ranging from 70 to 760.

Major Changes and Relationships

California pear production during the past 50 years increased sixfold. Marketings changed sharply. Farm prices varied in a pattern similar to fluctuations in general economic conditions. These changes are shown in the chart below. Past shifts, present trends, and prospects for the immediate future are summarized on the opposite page.

Figure 2

California Pears: Production, Utilization and Farm Price Five-Year Averages, 1910-59



Based on tables 1, 6 and 11.

THE SITUATION IN BRIEF

PRODUCTION of California pears surged upward during two periods: 1910-30 and 1940-55. The initial increase reflected mainly an acreage expansion; the second, a yield increase. As production rose the state's share went from one-quarter of the nation's crop to one-half.

Acreage expanded rapidly until about 1930, then declined sharply. The state now has 34,000 bearing acres (down a half from the 1932 peak) and 10,300 nonbearing acres.

Yield per bearing acre increased slowly to 3.6 tons in 1935-39, then rose sharply to 10 tons in 1955-59.

MARKETINGS of California pears changed markedly during the past several decades, as they did for Oregon and Washington pears. Quantities dried and shipped fresh decreased and the volume canned increased.

Fresh sales increased from 35,000 tons in 1910-14 to 125,000 tons in 1930-34, then decreased to 100,000 tons in 1950-59. This outlet took 60 percent of all sales in 1910-34 and 26 percent in 1955-59.

Canning expanded sharply--from 19,000 tons in 1910-14 to 69,000 tons in 1935-39 and to 275,000 tons in 1955-59. Canning increased from 28 to 71 percent of all sales.

Drying reached a peak of 35,000 tons (fresh-fruit basis) in 1935-39 and then declined to 9,600 tons in 1955-59.

Exports accounted for one-quarter of the Pacific Coast pear crop prior to World War II and one-tenth in recent years.

PRICES of California pears have varied considerably. Their average level was determined chiefly by consumer purchasing power, while annual changes were due mostly to year-to-year fluctuations in production.

Farm prices averaged \$60 per ton in 1920-29, declined sharply to a low of \$35 in 1930-39, then rose rapidly to a peak of \$95 in 1946-48. Since 1950, they varied about an average of \$75.

Auction prices for both Bartletts and other pears declined rapidly during the first three weeks of the season, then leveled off until about half the season's supply marketed. Some increases occurred in later weeks.

F.o.b. prices for canned and dried pears changed considerably more from year to year than they did during the season.

THE OUTLOOK can be indicated only tentatively, but it appears that:

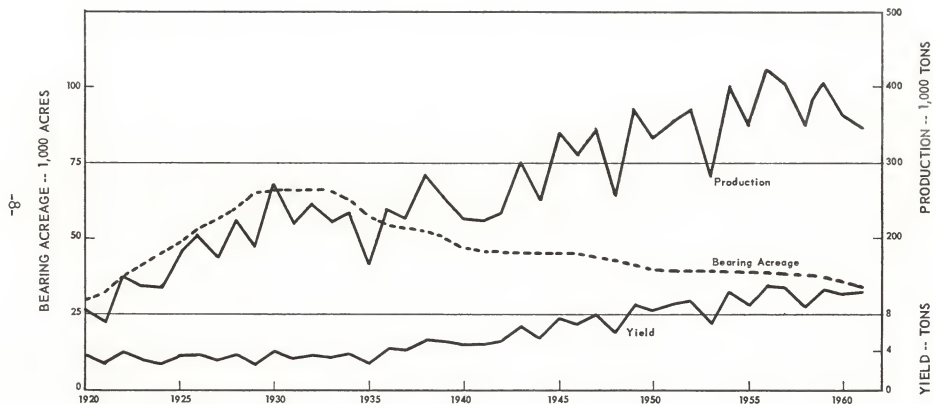
Production is likely to decrease in the immediate future, even though yield continues its present upward trend, as expected, because a large decline in bearing acreage seems likely. Later on bearing acreage may increase again as new plantings come into production.

Marketings are expected to shift further, though not by much, to more canning and less fresh sales.

Farm prices should improve relative to prices for other fruits.

Figure 3

California Pears: Production, Bearing Acreage and Yield, 1920-61



Based on table 1, supplemented by 1920-29 data from source quoted.

PRODUCTION

Two factors--bearing acreage and per-acre yield--determine production, both for a given season and over the years. Their relative importance in causing variations in pear production is shown in Figure 3. Production varies considerably from year to year and has a stable longer-run trend.

Annual fluctuations in production have been large due primarily to wide yearly variations in yield caused by changing weather conditions. Such production changes amounted to 48,000 tons, or 16 percent of the average crop, in 1931-61. They were 42,000 tons or less in fifteen of the past 30 years, 50,000 to 70,000 tons in eight years, and 75,000 to 120,000 tons in seven years. Thus, annual changes in production exceeded 25 percent of an average crop in one out of every four seasons.

Since 1910-14 production expanded from 64,000 to 385,000 tons due to changes in both yield and acreage. Until the early 1930's, yield changed little (aside from annual variations); hence the upward production trend was due principally to an expanding bearing acreage. During the next decade or so, production leveled off because average yield increased just about enough to offset the decrease in bearing acreage. Since about 1940, however, yield rose more rapidly while acreage declined more slowly; hence production expanded again--at about the rate prevailing prior to 1930.

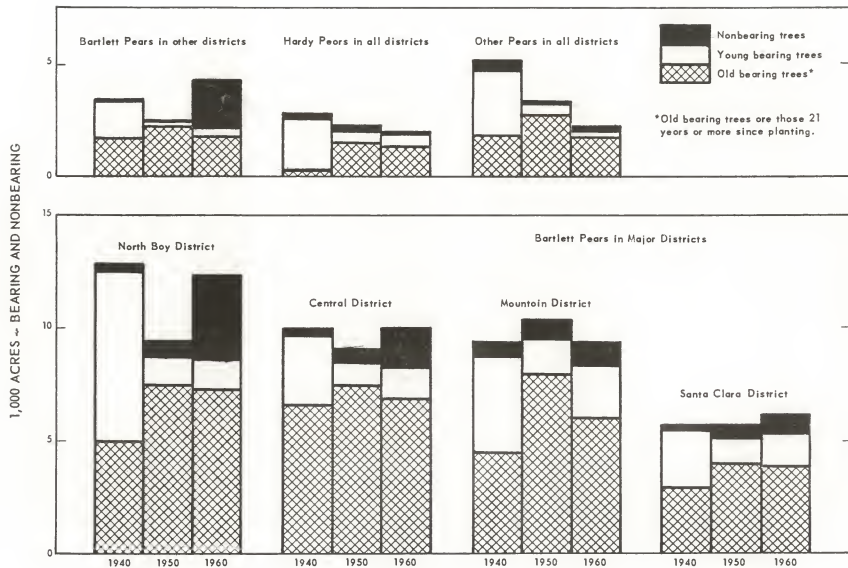
Past Changes in Acreage

California had 1.8 million pear trees, including 1.4 million of bearing age, in 1910. By 1920 the total increased to 4.5 million, with 2.3 million of bearing age, on 60,000 acres. Acreage expanded to 86,700 in 1927, then declined to 46,600 in 1960. The varietal composition, age distribution, and geographic location of this acreage changed considerably.

Between 1936 and 1960 acreage declined 17 percent for Bartletts and 43 percent for other pears; hence varieties other than Bartlett decreased from 16 to 9 percent of total pear acreage. In 1960 they were of about the same relative importance as in 1919.

Figure 4

California Pears: Age Classification of Acreage, 1940, 1950 and 1960



Based on tables 19, 20 and 21.

During this period (1936-60) acreage decreased at different rates for different varieties. It declined by one-third for Comice and Hardy, by two-thirds for Bosc and Winter Nelis, and by four-fifths for minor varieties. Hence the relative importance of Comice and Hardy rose from 38 to 61 percent of the acreage in pears other than Bartlett. Bosc and Winter Nelis declined from 33 to 25 percent and minor varieties from 29 to 14 percent.

These changes can be explained in the following way. Prior to World War II most of these pears were exported. Foreign shipments, however, were reduced sharply during the war and did not expand much in the postwar period. The Hardy was shifted rapidly for use in canned fruit cocktail. This new outlet proved to be a profitable one since prices received by growers were comparable to those for Bartletts. A considerable volume of Comice pears went into gift packaging. Other varieties, however, could not be used so satisfactorily in outlets other than regular fresh channels.

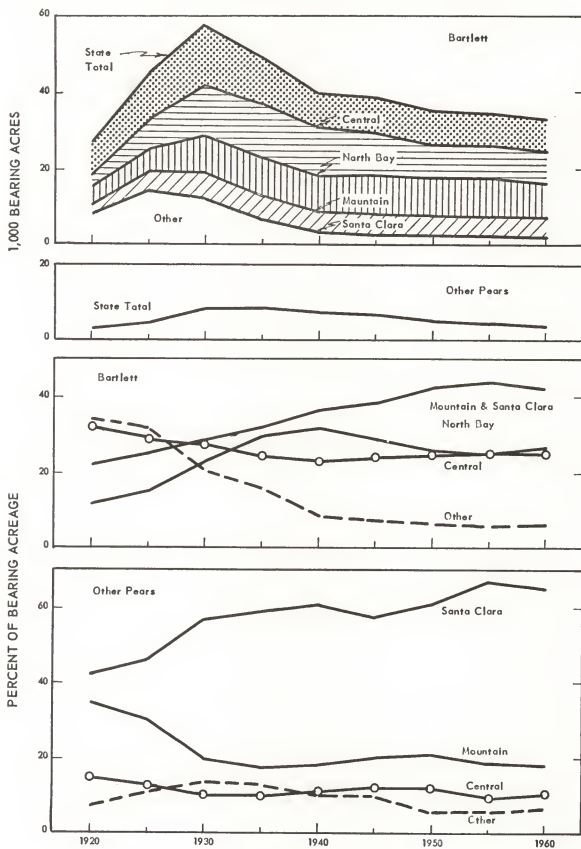
The most striking shift in tree age was in the proportion of acreage with nonbearing trees. This proportion rose to over 50 percent in 1920 as total acreage was expanded rapidly. It declined to below 5 percent in 1944-47 and then increased again to 20 percent in 1955-60 as new plantings were made. The average age of bearing trees also changed but to a lesser extent.

Figure 4 shows more detail on how age distribution changed during the past 20 years. Shifts that took place during 1940-50 were quite different from those occurring in 1950-60. The principal change between 1940 and 1950 was in the age of bearing trees. Older trees (over 20 years since planting) increased from 49 to 85 percent of bearing acreage. The major change in 1950-60 was in the increase of nonbearing trees--from 7 to 22 percent of total acreage.

Bearing acreage of Bartlett pears in three districts (North Bay, Mountain, and Santa Clara) increased from 34 to 68 percent of the state total between 1920 and 1960. Most of the decline in relative importance occurred in "Other counties"--from 30 to 3.5 percent of the total. For other pears the principal shift was a sharp increase in the Santa Clara district (43 to 65 percent) offset by declines in the Central and Mountain districts. Figure 5 shows these locational shifts.

Figure 5

California Pears: Bearing Acreage by Districts, 1920-60



Based on tables 17 and 18.

Commercial acreage also has become more concentrated in the principal pear-producing counties within each district. For example, since 1920 the relative importance of Lake County increased from 26 to 49 percent of pear acreage in the North Bay district, Santa Clara County from 60 to 80 percent of Santa Clara district's acreage, and Yuba County from 42 to 75 percent in the Marysville district.

Past Changes in Yield

Per-acre yield has varied in two ways. First, annual fluctuations have been large, due primarily to changing weather conditions during the blooming, growing, and harvesting season. Such changes amounted to about 15 percent of the average yield during 1931-61. They were below 0.7 tons in fifteen of the past 30 years, 0.9 to 1.6 tons in eight years, and 1.8 to 3.0 tons in seven years. These fluctuations caused corresponding variations in production.

The second variation in pear yield was its longer-run movement. From 1920 until the mid 1930's yield remained at about a constant level or possibly increased moderately. It averaged 3.3 tons in 1920-24, 3.5 in 1925-29, and 3.65 in 1930-34. Since then, however, yield had a strong upward trend, increasing from 4.4 tons in 1935-39 to 10.1 tons in 1955-61.

Much of this yield increase can be attributed to improved technical production practices--fertilization, new pesticides, better irrigation, etc. Fire blight, the scourge of pear growing in the 1930's, is under control. Pear scab, which caused considerable damage in some former years, is now largely prevented by proper spraying. Irrigation, not generally used on pears in earlier years, is a common practice. Preharvest sprays, to retard fruit drops, are widely used.

Other factors also served to raise yields. Less productivity trees were pulled, especially during the 1930's when prices were low. An increasingly larger proportion of the acreage consisted of trees at or near full maturity. New varieties have not been an important factor.

The upward trend in yield has been substantial and at a fairly constant rate. It averaged 0.28 tons per year during 1935-61.

An equation expressing yield, for these years, as a linear function of time (measured in years) was fitted separately to the data for all pears, for Bartlett pears, and for other pears. Very good fits were obtained--each value of coefficient of correlation is high (see Table III). The three trends are almost parallel, indicating that yield for Bartletts increased at about the same rate as for other pears. For the state as a whole, however, yield continued almost one ton higher for Bartlett pears.

State average yields are summarized in Table IV. Since 1935 yield has been higher for Hardy pears than for Bartletts, and lower for other varieties. The increase in yield for pears during the past 40 years parallels closely that for apples and peaches. Since about 1940, however, yield increased faster for these three fruits than for other deciduous tree fruits and for grapes.

Table III
Equations for Estimating Yield of California Pears

Item	All pears	Bartlett pears	Other pears
<u>Original observations: 1935-61</u>			
Average yield, tons per bearing acre	7.468	7.584	6.724
Standard deviation	2.376	2.354	2.621
<u>Regression equation: $Y=a+bX$ ^{a/}</u>			
Constant term, a	10.818	10.894	10.182
Regression coefficient, b	.279	.276	.288
Standard error of estimate, S	.856	.861	1.280
Coefficient of correlation, r	.933	.931	.873
Coefficient of determination, r^2	.870	.866	.762

^{a/} Linear equations, $Y=a+bX$, (where X is time, in years, with origin at 1960) were fitted, by method of least squares, to actual yields in 1935-61.

Source: Table 5A.

Table IV
California Yields for Pears and Other Fruits, 1920-59

Fruit	1920- 1934	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959
	tons per bearing acre					
<u>Pears</u>						
Hardy		5.5	5.9	9.5	11.1	11.2
Bartlett	3.5	4.5	5.6	7.6	8.9	10.1
Other		3.0	3.1	5.8	6.8	8.2
ALL	3.5	4.4	5.4	7.5	8.8	10.0
<u>Other deciduous</u>						
Apples	4.4	5.7	5.4	7.8	8.4	9.8
Peaches	4.5	6.5	8.0	9.8	9.7	10.8
Four other ^{a/}	2.5	3.4	3.0	3.8	3.9	4.2
Six above	3.2	4.2	4.3	5.7	6.0	6.8
Grapes	3.8	4.5	4.8	5.6	5.7	6.7

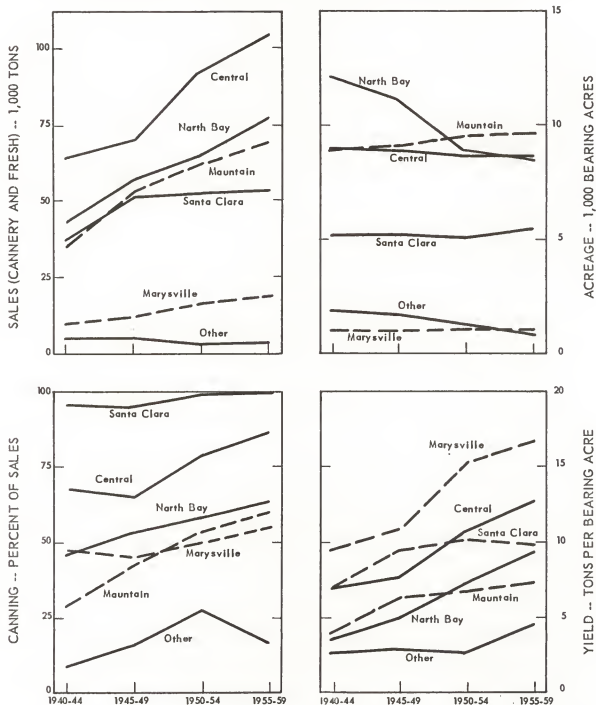
^{a/} Apricots, cherries, plums, and prunes (on fresh basis).

Source: Tables 1, 2, 4, 5, and 48.

Yield data are not published by districts. Such yields can be approximated, however, for Bartlett pears by comparing fresh and cannery sales with bearing acreages for individual producing areas. These comparisons make no allowance for district differences in other sales and in amounts not sold (farm use and waste). However, since fresh and cannery sales take most of the crop (91 percent in 1940-49 and 96 percent in 1950-59), the comparisons give a fairly good indication of relative yields. Some generalizations are possible (see Figure 6). Bartlett yield increased more and at a steadier rate in the Central, Marysville, and North Bay districts. Now yield is highest in the Marysville and Central districts and lowest in the Mountain district and in "Other counties." In the Santa Clara and North Bay districts yield is at about the state average.

Figure 6

California Bartlett Pears: District Sales, Acreage and Yield, 1940-59



NOTE: Based on table 15--rough approximations made to reflect complete fresh sales at markets within the state on a district basis in 1940-49.

Changes in Prospect

To predict future production requires making estimates of projected bearing acreage and yield. But these factors cannot be forecasted very accurately now because of uncertainties about the probable impact of pear decline. Yet some guides can be given.

To date pear decline has been much more severe in the Mountain district than elsewhere in the state. It has caused somewhat more damage to trees of 30 to 40 years in age than to older or younger trees. It has affected different varieties with about equal force. Apparently, the main reason for this pattern of impact is that trees on oriental rootstock are particularly susceptible to the disease.

Pear acreage will change from three causes. Trees diseased by pear decline will be pulled. Other trees, including some healthy ones in whole blocks where pear decline is severe, will be removed. New acreage will be planted. Removal and planting rates may be quite different in the next few years than in the more distant future.

Growers' expectations of possible future shortages may stimulate heavy plantings during the next few years. Such decisions, however, would not affect production for six years. In the meantime, trees will be removed. If present bearing acreage (estimated at 33,800 acres for 1961) is to be maintained, trees coming into production (from present nonbearing acreage) must equal removals. This appears unlikely. There are about 10,300 acres of nonbearing trees (the 1960 figure is used since an estimate for 1961 is not yet available). These will become of bearing age by 1967 or 1968 at an average annual rate of 1,600 acres. But trees have been removed more rapidly in recent years--3,060 acres in 1959, 3,260 in 1960, and still more in 1961. If trees were removed at this rate for five years, bearing acreage would decrease by almost 25 percent. The removal rate will not drop much until pear decline is brought under control.

How will yield change? Annual fluctuations will continue to be large. Presumably growers will endeavor to modify cultural practices, insofar as possible, to dampen this yearly variation. However, there is no factor now known whose influence would serve to reduce these fluctuations much below their present magnitude.

Whether average yield continues to increase in the future at about the rate experienced in the past depends upon the net effect of several factors. Some will tend to accelerate the present trend and others to retard it. Possibly the most important factors to consider are the inroads of urbanization, the use of good cultural practices, and the changing composition of bearing acreage.

Urbanization already has made substantial inroads on orchard lands. Additional acreages will be converted to residential, industrial, and highway uses. Tree removal will be determined, as in the past, largely by orchard location and not by relative yield. Since much of the suburban growth may be localized in the Santa Clara Valley, where yield is somewhat above the state average, the net effect may be to lower yield--but only slightly.

Better cultural practices introduced over the years have served to raise average yields substantially. In the future growers will have an even greater incentive than in the past to use the best practices available and to adopt promptly further improvements as may be developed. Expenditures for cultural care not justified formerly will become profitable as production declines because of reduced bearing acreage.

Probable changes in the varietal composition and age distribution of acreage are not expected to affect yield much. The removal of all acreage in varieties with yields above (or below) that for Bartlett's would change average yield by only a fraction of 1 percent. Yield will be lowered to the extent that damage from pear decline is proportionately greater among older trees. It will be raised as trees on the remaining acreage increase in age. These two tendencies should tend to offset each other.

The prospective decrease in the proportion of acreage located in the Mountain district, where yield is relatively low, will raise average yield. An example will indicate that the resulting increase would not be large. Suppose bearing acreage declines sharply from 8,000 to 2,000 acres in the Mountain district and remains at 26,000 acres in other areas. Then the state average would be raised by 5.4 percent. Presumably this example overstates

the yield increase likely to occur since the locational shift will be less extreme.^{1/}

Yield will increase largely due to better cultural care of trees and to locational shifts in bearing acreage. For the immediate future the increase may be at about the rate (0.28 tons per year) experienced since the mid 1930's. The upward trend may be less in the late 1960's, if large acreages of new plantings come into production because relatively more of the bearing acreage would be in younger trees.

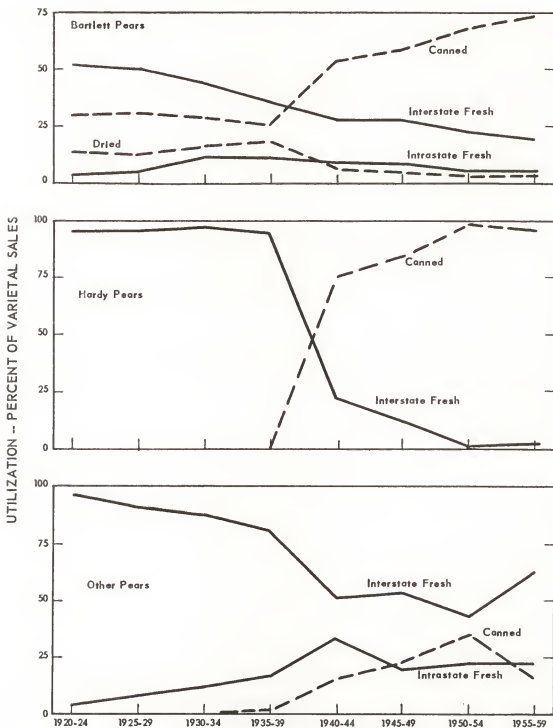
This analysis indicates the following production picture:

1. Production will continue to be subject to large annual fluctuations as in the past due to yearly variations in yield.
2. Production will decline for the immediate future because the expected upward trend in yield will not suffice to offset the probable reduction in bearing acreage. A decrease of about 10 percent in five years seems likely if tree losses due to pear decline continue at present rates.
3. Production may reverse its downward trend a few years before bearing acreage begins to increase because of the upward shift in yield.

^{1/} Yield would be raised 3.4 percent by a 50 percent decrease in bearing acreage in the Mountain district and 7.7 percent by the removal of all bearing trees in this area. Here we assume, as is approximately the case, that normal yield in the Mountain district is 70 percent of the average for other areas.

Figure 7

California Pears: Varietal Disposition of Sales, 1920-59



NOTE: Use of pears in minor outlets is not shown. Based on tables 7, 9 and 10.

MARKETINGS

The entire California crop was harvested and used (except for normal cullage) in all years prior to 1927, in only four of the next 18 years, and in most seasons after 1945. Quantities remaining unharvested (because of excessive production or depressed economic conditions) were large in seven years, averaging 11 to 26 percent of the crop in 1930, 1932, and 1933, and 5 to 8 percent in 1931, 1937, 1938, and 1949. Smaller amounts were unused in nine years during 1927-45 and in 1957.

Practically the entire harvested production went into commercial channels. Pears retained by growers for use in their households, as estimated by the Crop Reporting Board, averaged 1,640 tons (2.6 percent of the crop) in 1910-14. The quantity increased to 2,400 tons (2.0 percent) in 1920-24, and then decreased to 1,100 tons (0.3 percent) by 1955-60.

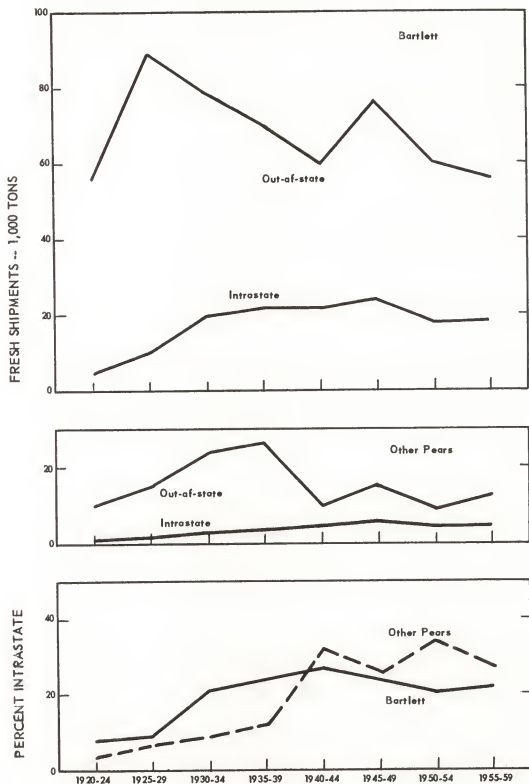
The utilization pattern remained fairly stable until the early 1930's and then changed sharply. Cannery use increased from 28 percent of total sales in 1910-34 to 71 percent in 1955-59. Fresh shipments decreased from 60 to 26 percent during this period and drying from 12 to 3 percent. Figure 7 shows these shifts on a varietal basis.

Fresh Sales

Shipment of California pears to fresh markets increased to a peak of 125,000 tons in 1930-34 and then declined 20 percent to a level of 100,000 tons maintained during 1950-60. Shipments from the state (including exports) reached their peak five years earlier and decreased somewhat more (almost 25 percent). Intrastate sales continued to increase until the mid 1940's.

Figure 8 indicates these changes during the past 40 years. Intrastate sales rose from 9 percent of fresh Bartlett marketings in 1920-29 to an average of 23 percent maintained since 1930. This shift also occurred with other pear varieties, but it came later and was more pronounced. The proportion increased gradually from 4 to 12 percent during 1920-39, then jumped to a level of 30 percent maintained after 1940 when exports were cut drastically.

Figure 8
California Pears: Fresh Sales, 1920-59



Based on tables 7 and 8.

Interstate Shipments

Bartlett pear shipments from California increased rapidly until 1925-29-- to an annual volume of almost 90,000 tons. Most of the subsequent decrease (to 66,000 tons in 1955-59) took place by 1940. Interstate shipments of other pears continued to expand until World War II (to an average of 26,000 tons in 1935-39), and then dropped suddenly to a level of 11,000 tons maintained since 1940.

The sharpness of this reduction in interstate movement can be observed by comparing annual shipments for the past 15 years with those for the 15 years immediately prior to the war (see Table V). The average for 1925-39 exceeded annual shipments in 13 of the past 15 years, while shipments in only two of the 15 years during 1925-39 fell below the 1946-60 average.

Table V
Annual Interstate Shipments
of California Pears

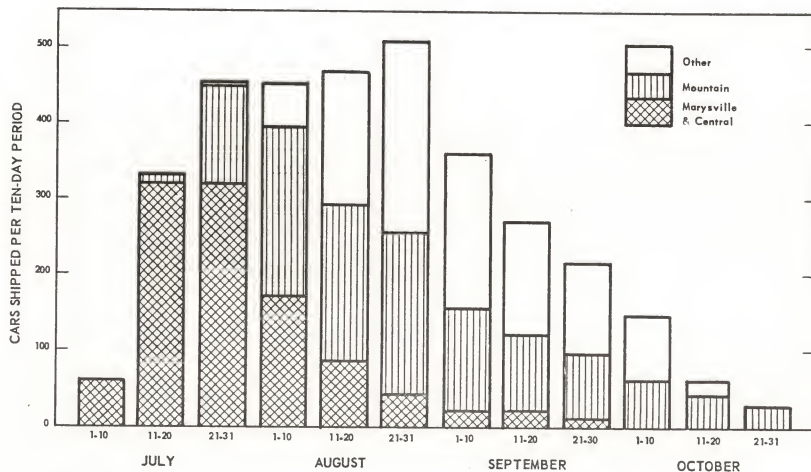
Shipments 1,000 tons	1925- 1939 number of years	1946- 1960
130-149.9	1	0
110-129.9	3	0
90-109.9	7	4
70-89.9	3	8
50-69.9	1	2
30-49.9	0	1
Number of seasons	15	15
Average shipment	100.9	79.4
Median shipment	97.8	84.4

Source: Based on Table 6.

Pears in the principal growing areas of the state mature at different dates. They move to market on the staggered basis shown in Figures 9 and 10. Early shipments of Bartletts originate in the Marysville and Central districts. These are followed, in a few weeks, by pears from the Mountain district and still later by those from other areas.

Figure 9

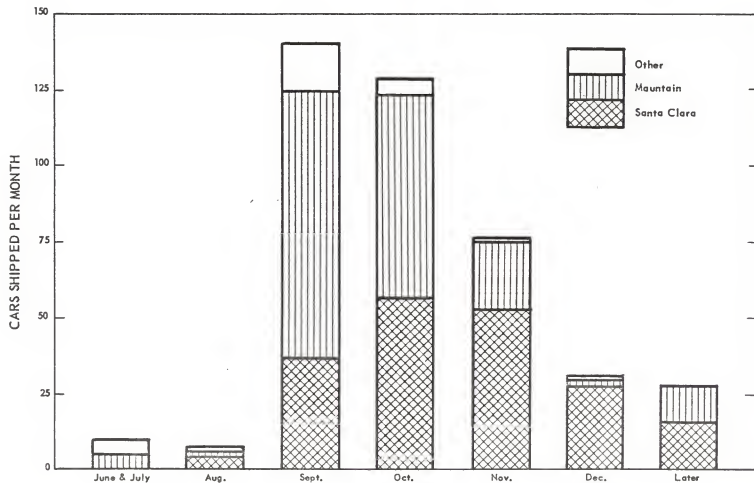
California Bartlett Pears: Interstate Rail Passings, Ten-Day Periods, by District,
1955-59 Average



Based on table 23.

Figure 10

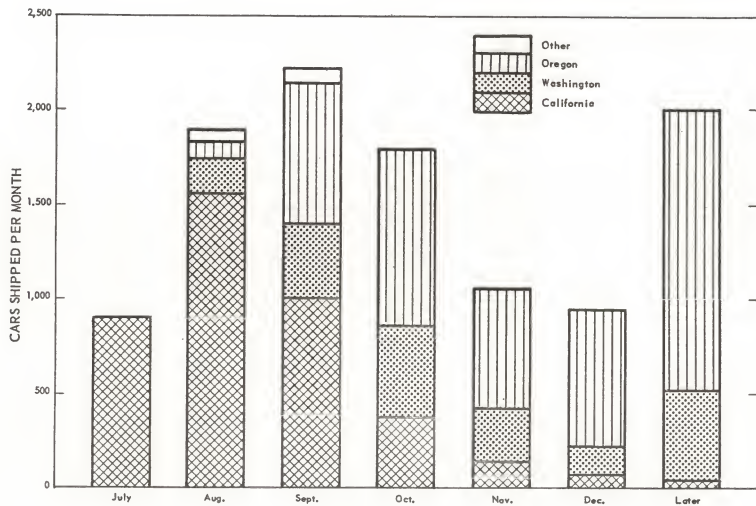
California Pears Other Than Bartlett: Monthly Interstate Rail Passings,
by District, 1955-59 Average



Based on table 24.

Figure 11

Pears: Monthly Interstate Rail Shipments, by State, 1955-59 Average



Based on table 29.

About 90 percent of the other pears shipped fresh from the state come from two districts: Mountain and Santa Clara. Their shipping seasons are different, even though the separation is not as pronounced as for Bartlett pears. Substantial quantities are shipped from both districts only during about six weeks, centered on October. Half of the shipments from the Mountain district are made by September 30, while the movement from Santa Clara is small. The latter district ships half of its supply in November and later, after 85 percent of the shipments from the Mountain district are made.

The seasonal movement of pears also varies among states (see Figures 11 and 12). California markets its pears much earlier, completing 60 percent of its shipments during July and August while marketings from other states are small--only 10-15 percent of the total. In September 45 percent of the shipments come from California, 50 percent from Oregon-Washington, and 5 percent from other states. California accounts for only one-tenth of later shipments.

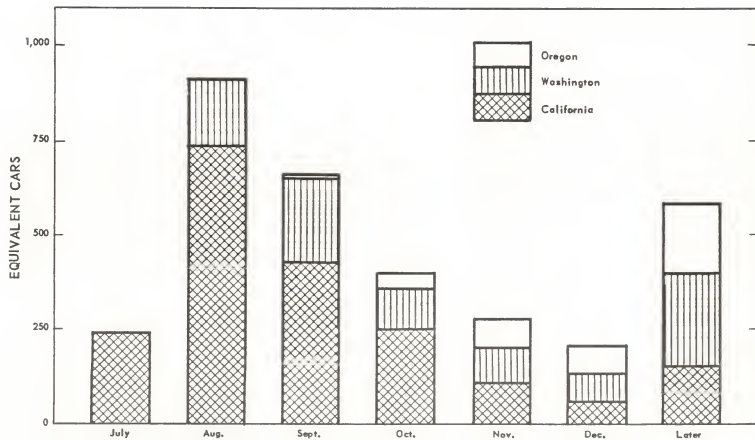
Our final shipment chart (Figure 13) indicates the changing composition of out-of-state shipments of Bartletts. Shipments from the Mountain district during the past 20 years continued at almost 40 percent of the total. Central district declined from 29 to 20 percent, while two districts improved their relative position: North Bay from 23 to 30 percent, and Marysville from 8 to 10 percent.

Larger fruit sizes were shipped in greater volume. Pears of size 120 and larger increased from 28 percent of total Bartlett shipments in 1945-49 to 36 percent in 1955-59; size 165 and smaller decreased from 26 to 16 percent. Regulations issued under the industry's federal marketing order curtailed shipments of small sizes directly. They also had an indirect effect: as the small sizes were restricted from interstate shipment, growers altered cultural practices to get more of the larger-size fruit.

Auction Marketings

Auction markets have become less important in selling California pears. During the past quarter century auction sales of Bartletts declined from 63 to 38 percent of interstate shipments (see Table VI). This shift is similar to

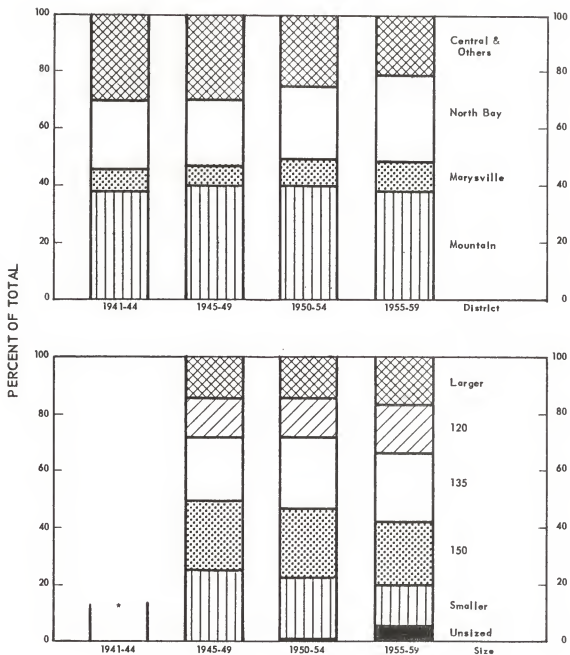
Figure 12
Pacific Coast Pears: Monthly Truck Shipments, 1955-59 Average



NOTE: Reported shipments (for these three states) represent a substantial portion of, but not the entire quantity moved by truck. Data on truck shipments are fragmentary for other states. Based on table 30.

Figure 13

California Bartlett Pears: Out-of-State Shipments,
by District and Size, 1941-59.



*Comparable data on shipments by size not available for years prior to 1945.
Based on tables 25 and 27.

Table VI

Auction Sales Distribution of California Bartlett Pears, 1935-59

Market	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959
sales--1,000 packages					
Auction sales					
New York	809	546	507	503	431
Chicago	278	239	228	221	177
Philadelphia	207	186	177	180	152
Three major markets	1,294	971	912	904	760
Nine minor markets	589	520	440	457	309
All auction markets	1,883	1,491	1,352	1,261	1,069
Private sales ^{a/}	1,131	1,095	1,933	1,771	1,762
Interstate shipments ^{b/}	3,014	2,586	3,285	3,032	2,831
percent of interstate shipments					
New York auction	26.9	21.1	15.4	16.6	15.2
Other auctions	35.6	36.6	25.7	25.0	22.6
Private sales	37.5	42.3	58.9	58.4	62.2

^{a/} Difference between auction sales and interstate shipments.^{b/} Converted from tonnage data at 43 packages (or 46.5 pounds) per ton.

Source: Tables 7 and 31.

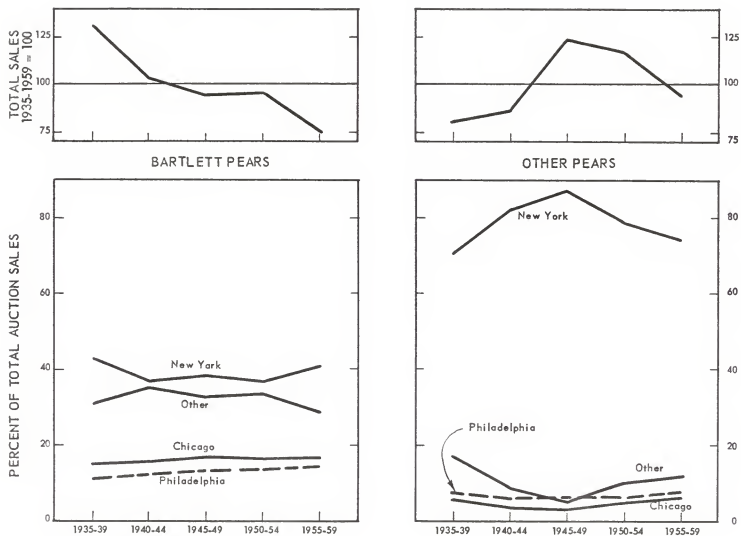
that occurring for other fruits. For example, between 1935-39 and 1955-59 auction sales decreased from 68 to 47 percent of plum shipments and from 80 to 66 percent of apricot shipments. The change was not so definite for other pear varieties even after exports declined sharply during the war. Auction sales were 56 percent of shipments from California (including exports) in 1940-44, 47 in 1945-49, 73 in 1950-54, and 41 in 1955-59.

Nevertheless, auction data still give a good basis for indicating trends and relationships for sales and prices at out-of-state markets. The next six charts indicate these comparisons for the past several decades.

The distribution of sales among individual auctions has not changed much. New York has been and still is the major auction market. It continued during 1935-59 to account for 40 percent of the Bartletts sold at

Figure 14

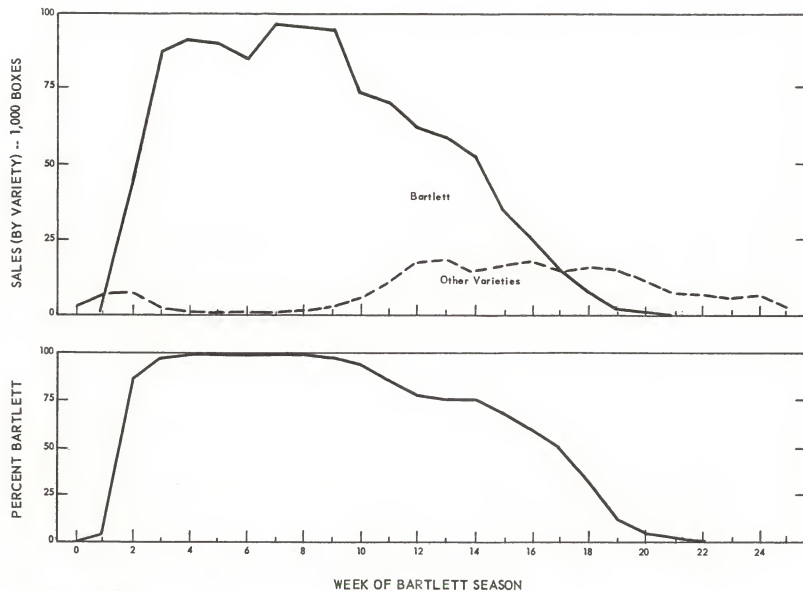
California Pears: Auction Sales, by Major Markets, 1935-59



Based on tables 31 and 32.

Figure 15

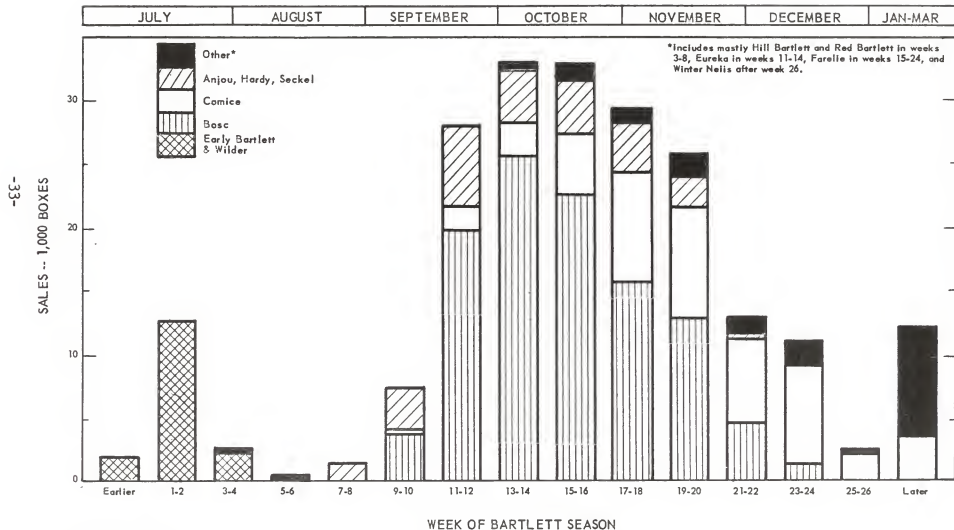
California Pears: Weekly Auction Sales, Bartlett and Other, 1955-59 Average



Based on table 37.

Figure 16

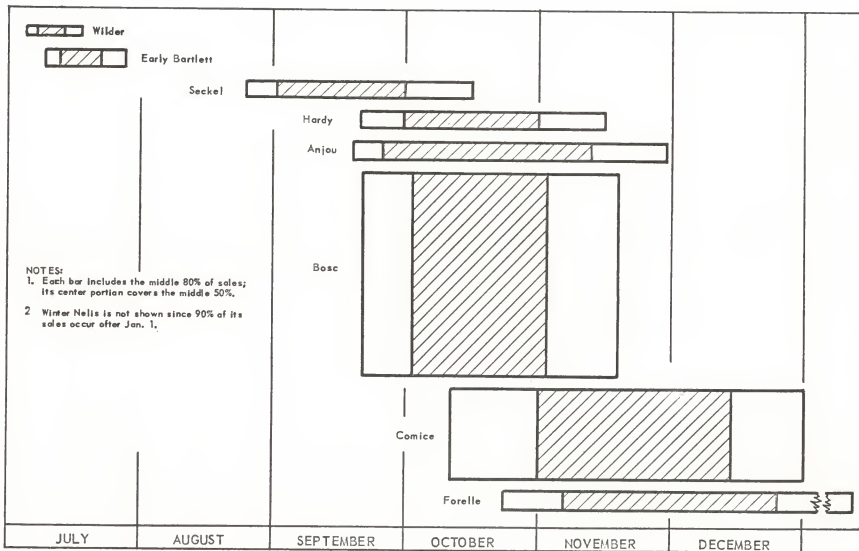
California Pears Other Than Bartlett: Bi-weekly Auction Sales, 1955-59 Average



Based on table 36.

Figure 17

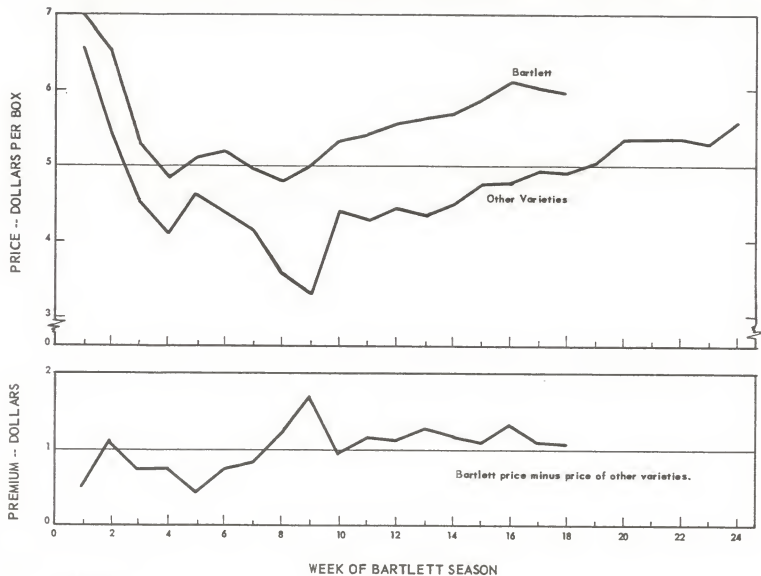
California Pears: Varietal Marketing Periods at Eastern Auctions, 1955-59 Average



Based on table 36.

Figure 18

California Pears: Weekly Auction Prices, Bartlett and Other, 1955-59 Average



Based on table 37

auction and 80 percent of other pears. Chicago and Philadelphia took about half of the balance--slightly less for Bartletts and slightly more for other pears. Figure 14 indicates that this relationship did not change drastically during the past 25 years with one exception: sales were relatively heavier at New York 15 to 20 years ago than earlier or later.

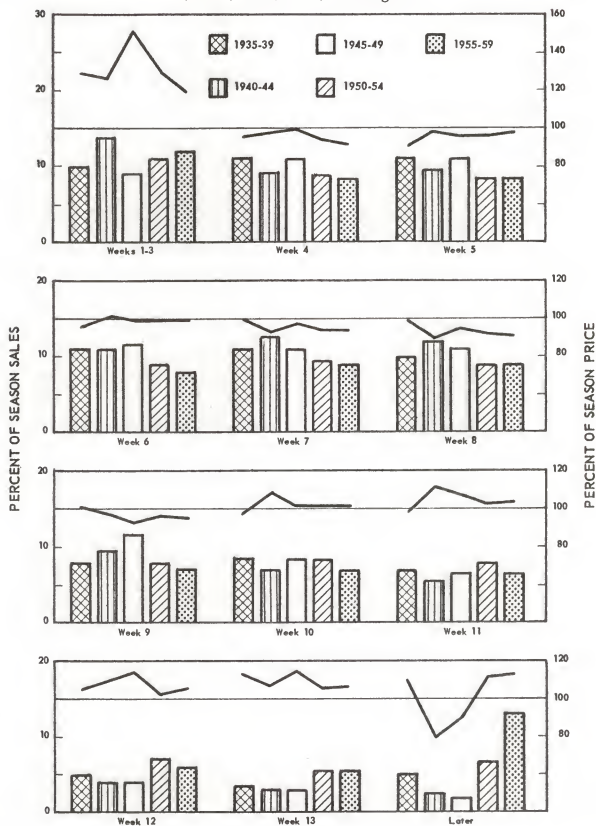
Weekly distributions of auction sales and prices prevailing in 1955-59 (see Figures 15-18) are similar to those in former years. The following patterns usually take place:

1. Bartlett sales increase rapidly to a weekly average of about 90,000 boxes maintained during July 20-August 31 (weeks 3-8), decrease to 50,000 boxes in October 7-12 (week 14), and are practically completed by October 31 (week 17).
2. Sales of other pears follow a different (and bimodal) pattern. About 8 percent of the total (consisting chiefly of the Wilder and Early Bartlett varieties) is sold in July. Sales are small (less than 5 percent of the total) during August and the first half of September. After mid September, by which time 70 percent of the Bartletts are sold, sales of other pears become large. They remain considerable until late November. Most of the pears sold after January 1 are of the Winter Nellis variety.
3. The middle 80 percent of auction sales take place during 11 weeks, July 25-October 10, for Bartlett and during 14 weeks, September 10-December 15, for other pears.
4. Bartletts exceed 75 percent of the California pears sold each week from July 15 to October 15. They constitute over 90 percent of the pears sold by October 15 and 40 percent of later sales.
5. Auction prices are higher for Bartletts than for other pears--by about 80 cents per box until late August and by \$1.20 thereafter.

Weekly auction sales and prices of Bartlett pears are shown by five-year averages in Figure 19. These are expressed as percentages to facilitate comparisons of changes in relative sales and in relative prices. Although seasonal patterns did not shift sharply during the past quarter century, some changes did occur. Possibly the most noticeable one of these was the relative increase in sales after September. Sales for week 12 and later rose from 11 percent of the season total in 1935-44 to 22 percent in 1950-59. Sales decreased correspondingly during August and early September--from 63 to 51 percent for weeks 4-9.

Figure 19

California Bartlett Pears: Weekly Auction Sales and Prices,
1935-39 to 1955-59 Averages



Based on table 34.

Table VII

Changes in Weekly Auction Prices and Sales of California Bartlett Pears

Change ^a in price	Change in sales ^{a/}					
	-3.0 and under	-2.9 to -1.0	-0.9 to +0.9	1.0 to 2.9	3.0 and over	Total
9.0 and over		2				2
8.9 to 3.0	1	2	5	1		9
2.9 to -2.9		9	8	3		20
-3.0 to -8.9		2	3	5		10
-9.0 and over				2	1	3
Total	1	15	16	11	1	44

a/ Changes are percentage points of increase or decrease between successive five-year periods (1935-39 to 1955-59) for weeks 4-14.

Source: Based on Table 34.

Generally, changes in relative prices from one five-year period to the next were in the opposite direction to corresponding changes in relative sales, especially during weeks 4-14 when 85 percent of the sales occurred. The extent of this inverse relation is shown in Table VII.

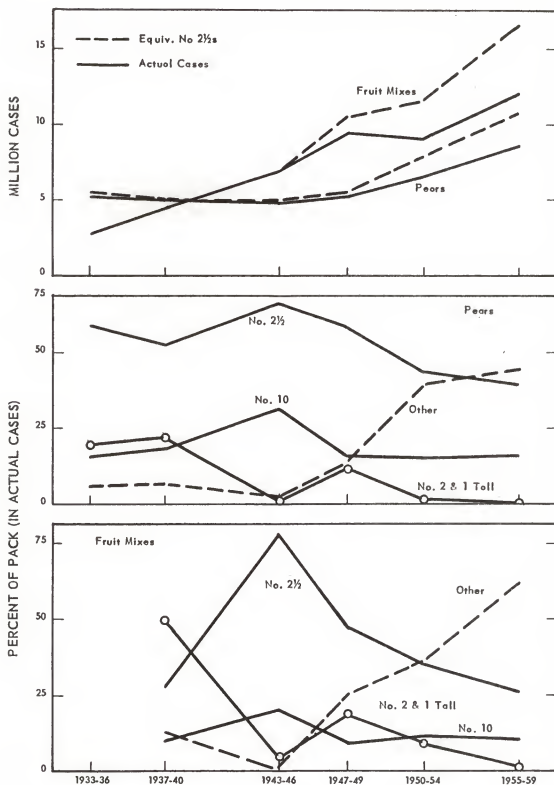
Processing Uses

From 1910 until the mid 1930's about 25 to 30 percent of the California pear crop was canned. The importance of this outlet increased sharply during the past 25 years. The quantity canned increased from 69,000 tons (30 percent of the crop) in 1935-39 to 272,000 tons (71 percent) in 1955-60. Two factors caused this expansion. The pack of canned pears increased from a level of 1.7 million cases in 1930-49 to 4.4 million cases in 1955-60. Use of pears in other canned items expanded rapidly since about 1930.

The pear content in canned fruit cocktail and fruit salad amounted to an equivalent of about 4.2 million cases of canned pears in 1955-60. Thus about the same volume of California pears was used for these fruit mixes as for canned pears. Additional quantities of canned pears went for producing other canned products: baby foods, pear nectar, pear juice, etc.

Figure 20

Canned Pears and Fruit Mixes: U. S. Pack by Can Size, 1933-1959



NOTE: Fruit Mixes include Fruit Cocktail, Fruit Salad, and Mixed Fruits. Based on tables 40 and 41.

Since the war smaller containers have been used much more for canned pears and fruit mixes, as for other canned fruits and vegetables (see Figure 20). The proportion going into the small 8-oz. can was doubled. However, the principal change was the replacement of No. 2 and No. 1 tall cans by the smaller No. 300 and No. 303 cans.

Until about 30 years ago a substantial part of the California pear crop was dried--an average of 12 percent in 1910-29 and 15 percent in 1930-39. However, the demand for dried pears (at home and abroad) declined after World War II, and the quantity dried decreased sharply from 35,500 tons in 1935-39 to only 9,600 tons (2.5 percent of the crop) in 1955-60.

Small volumes of pears went to other processing outlets in some years. About 6,000 tons were crushed in 1943 and 300 tons in 1945. An average of 500 tons was frozen in four years: 1943, 1945, 1946, and 1948. After 1948 the quantities entering minor processing outlets were negligible and were not reported separately by the Crop Reporting Board.

Exports and Imports

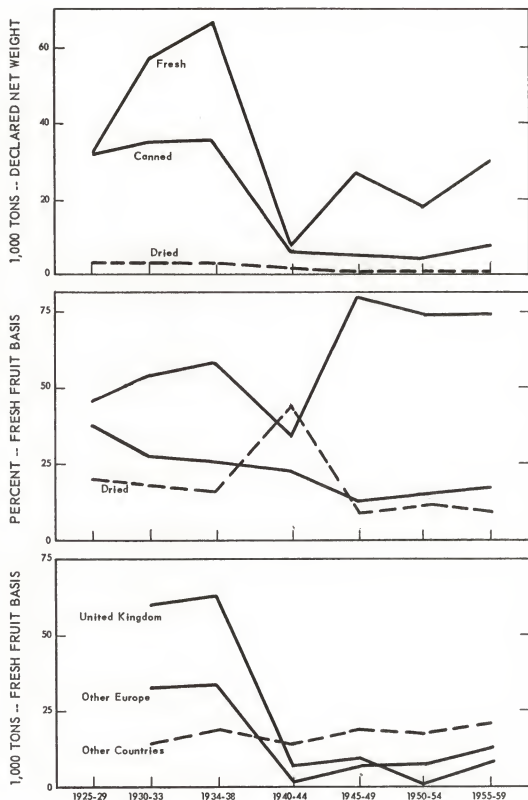
Foreign markets were an important outlet for pears prior to World War II. They took about 80, 35, and 15 percent, respectively, of the dried, canned, and fresh pears in the 1930's. Exports still are important to the pear industry, even though they are at only half of their prewar level. Figures 21 and 22 indicate the nature of this change in export shipments.

The large reduction in exports was due chiefly to reduced shipments to Europe. Exports (fresh-fruit basis) dropped from 60,000 tons (exclusive of dried and canned fruit salad) in 1930-39 to 7,000 tons in 1955-59 for the United Kingdom and from 33,000 to 13,000 tons for other European countries. On the other hand, shipments to Canada and Latin America increased from 12,000 to 20,000 tons.

Current exports (1955-59) are 20 percent of the 1930-39 average for dried pears, 25 percent for canned pears, and 50 percent for dried fruit salad and for fresh pears. Shipments of pears in canned fruit salad, however, are almost 100 percent above prewar.

Figure 21

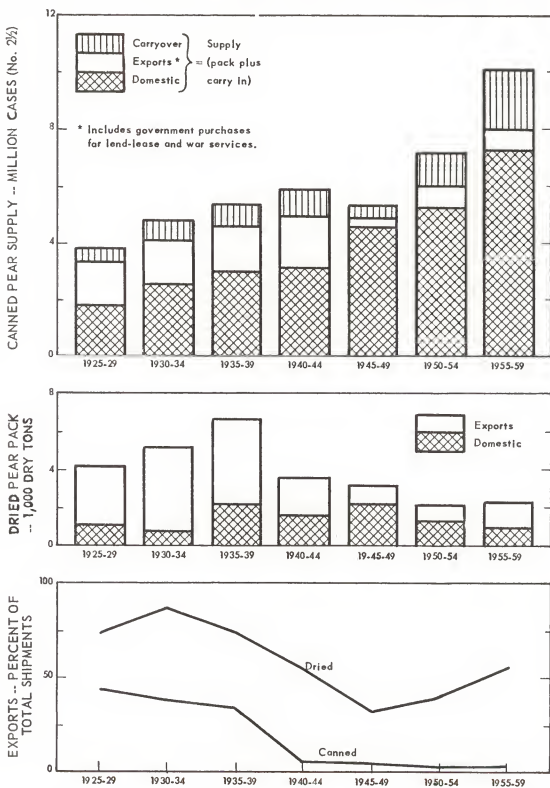
Pears: U. S. Exports, 1925-59



Based on table 43.

Figure 22

Canned and Dried Pears: Disposal of Pacific Coast Supplies, 1925-59



Based on tables 38 and 39.

Total pear exports averaged some 135,000 tons (fresh-fruit basis) in 1930-39, declined sharply to 27,000 tons during the war period (1940-44), and then increased to 62,000 tons in 1955-59. This reduction was of major importance to pear producers in California, Oregon, and Washington since practically all exports come from these states. The importance of exports decreased from 33 percent of the Pacific Coast crop in 1930-39 to 9 percent in 1955-59.

This country has imported a limited quantity of fresh pears. Imports were negligible until 1938, then increased to a level of 5,300 tons maintained during 1939-54. In 1955-59 they averaged 7,600 tons--equal to about 1 percent of the United States pear crop and 12 percent of the quantity exported.

About 85-90 percent of the total arrives during March-June, when domestic supplies are small or not available. Most of these imports (90 percent) come from Argentina. Chile and Canada account for practically all of the remainder.

Changes in Prospect

The drying of pears declined sharply some 25 years ago. Pears have been used to only a limited extent in minor processing outlets. There is no reason for expecting a significant increase in the use of pears for these purposes. In other words, the problem of indicating future shifts in utilization patterns can be approached by focussing attention on fresh and cannery sales alone since these two outlets will take practically all the pears produced in California in the near future.

Whether relatively more pears will be canned or shipped fresh in the future than presently is primarily a question of relative changes in farm prices for pears entering the two major outlets. A price analysis aimed specifically at this problem has not been made. Consequently, the problem must be considered in more general terms. However, there are several reasons for expecting further expansion in canning relative to fresh sales.

Consumption is increasing more rapidly for canned fruits than for fresh fruits. California pears, which enter both outlets in large volume, can be expected to participate in this general shift. This implies a greater proportion of the pear crop being packed as canned pears.

Already almost half of the cannery pears are packed as canned fruit cocktail and fruit salad. Demand for pears in this outlet will increase because of prospective upward trends in the consumption of all canned fruits and in the production of cling peaches, the other major ingredient in fruit mixes. Of course, if farm prices for pears increase relative to those of other fruits (because of reduced production or other reasons), canners may tend to reduce the quantity of pears used in fruit cocktail. However, consumer preferences and grade standards set limits on possible changes.

Canned pear products (baby food, nectar, etc.) have been processed in increasing volume due to favorable consumer acceptance. However, if pear production declines sharply, processors may restrict their packs of these products in order to use more pears for canned pears and fruit cocktail. The quantity of pears sold to canners is likely to be affected only negligibly by changes in the packs of pear products since they take a small part of the cannery pears.

These are the principal reasons for expecting the canning outlets to draw pears away from fresh sales. However, a sharp change in this direction is not likely since consumers also like to eat fresh pears.

PRICES

Farm prices for California pears have varied widely in response to influences exerted by numerous factors. Changes in consumer purchasing power and in California pear production were responsible for much of the price variation. However, also significant were changes in such other factors as consumers' "preferences" for pears, quantities exported, pear production in other states, and availability of other fruits.

Past Relationships

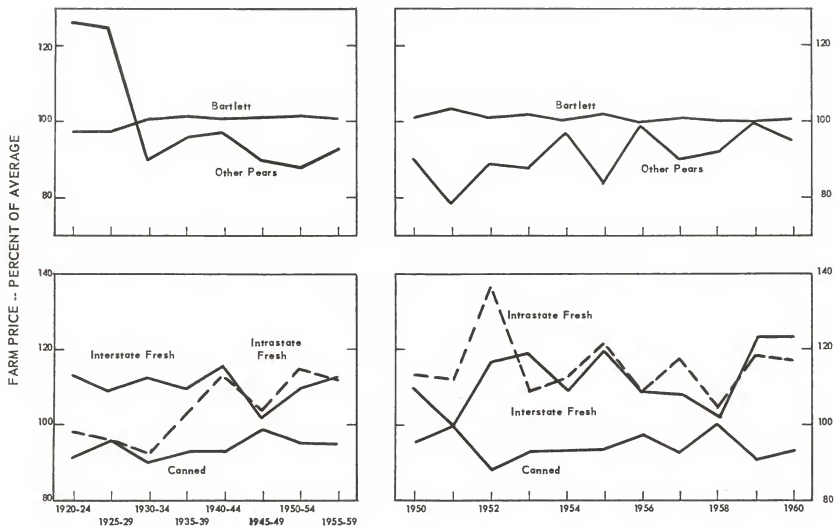
Until about 30 years ago consumer demand for fruits and vegetables (here and abroad) was rising and extremely low farm prices prevailed only when bumper crops were produced. The situation was changed drastically by 1930. A serious divergence arose between the supply of and the demand for pears, as for most agricultural products. The farm price in California pears dropped steeply from \$58.10 per ton in 1927-29 to \$22.80 in 1930-33. During this period sales increased very little--from 195,000 to 200,000 tons. (An average of 37,000 tons, or 16 percent of the crop, was not utilized in 1930-33 compared to only 1,300 tons in 1927-29.) Prices rose from \$25.20 in 1935-40 (equal to the average for 1930-34) to \$85.20 in 1943-46, even though sales increased by 30 percent in California and by an equal amount in the Pacific Northwest. These two comparisons indicate the large influence exerted by purchasing power in setting the level of farm prices.

During the past 50 years farm prices ranged from a low of \$13.70 in 1938 to a high of \$114.90 in 1948. A rapid rise in purchasing power caused much of this price increase. However, production changes were also of importance. In 1938 the price was just 50 percent of the average for the three preceding and three subsequent years while production was 27 percent greater. In 1948 the opposite situation occurred: the farm price was 59 percent higher and production 25 percent lower.

This inverse relationship between farm prices and production is indicated clearly by a comparison of annual fluctuations. The correlation coefficient between yearly variations in farm prices and production for California pears is $r = -0.601$. It is $r = -0.735$ if changes in the

Figure 23

California Pears: Farm Price by Variety and Utilization, 1920-60



Based on tables 11, 12 and 13.

production of all Pacific Coast pears are used. This result indicates that for 1943-60 about half (the value of r^2) of the year-to-year changes in farm prices for California pears are explainable by annual fluctuations in pear production--somewhat less if only the California crop is considered and somewhat more if the entire Pacific Coast crop is considered.

Farm prices have fluctuated considerably from one season to the next. For example, since 1943 the yearly change averaged \$16.50 per ton, or about 21 percent of the average price (\$76.60) for this period. It was below \$14.00 per ton in seven of these 18 years, \$16.00 to \$22.00 in seven, and \$41.00 to \$84.00 in the other four. In other words, once every four or five years, on the average, the price change amounted to more than 50 percent of its average level.

Relative prices for different segments of the California pear crop (see Figure 23) changed in two important ways. They increased for Bartletts and for pears sold fresh at California markets.

The farm price was lower for Bartletts than for other pears every year during 1919-28, by an average of 24 percent. The Bartlett price was higher in every subsequent year except 1935, when it was \$1.00 less. For the period (1929-60) the Bartlett price averaged 10 percent more.

During 1915-34 the farm price was 15 percent lower, on the average, for fresh pears sold within the state than for pears shipped to out-of-state markets. Since 1935 farm prices for pears sold in these two fresh outlets have been about equal. The difference was less than \$1.50 per ton in ten of the past 26 years and amounted to \$1.70 to \$4.00 in six years. The price was higher by about \$5.00 to \$10.00 on interstate sales in five years and on intrastate sales in five years.

Since 1909 the cannery price exceeded the price for fresh pears in about two seasons per decade. It was higher by \$9.00 to \$23.00 per ton in five of the past 52 years and by \$5.00 or less in seven years. It was lower by \$8.00 or less in 14 years, by \$9.00 to \$15.00 in 11 years, and by \$16.00 to \$36.00 in 15 years. For the entire period (1909-60) the farm price was 15 percent lower for cannery pears than for those sold fresh.

Price Analyses

The above discussion describes the price relationships existing in the past and can provide a basis for indicating certain shifts that may occur in the future. However, it fails to indicate the price-quantity relations facing sellers of pears whether these sellers are growers, processors, or handlers. To deduce the relevant demand functions requires empirical studies to identify the principal factors responsible for variations in pear prices (at the particular level under consideration) and to determine the influence of each.

A second phase of the present economic study of the California pear industry will be directed toward making such statistical analyses of price determination. It will be oriented primarily toward the statistical derivation of: (1) the price-quantity relation encountered by growers in disposing of their crop at the farm level and (2) the "demand" relations facing handlers who sell pears at auction markets.

The author knows of only one painstaking empirical investigation of this type. The study by Hoos and Kuznets uses three factors to account for variations in f.o.b. prices of canned pears.^{1/} Their findings are:

1. "A change of 1,000,000 cases in the commercial domestic movement (24 No. 2 1/2 basis) of Pacific Coast canned pears, considered by itself, was on the average accompanied by a change in the opposite direction of about 73 cents a case in the F.o.b. price (Choice, No. 2 1/2) of Pacific Coast canned pears."
2. "An increase of 10 per cent in the index of disposable income, considered by itself, was on the average accompanied by an increase of about 50 cents a case in the F.o.b. price...."
3. "A change of 10 points in the adjusted index of prices of competing canned fruits, considered by itself, was on the average accompanied by a change in the same direction of about 16 cents a case in the F.o.b. price...."

^{1/} Sidney Hoos and G. M. Kuznets, "Pacific Coast Canned Fruits: F.o.b. Price Relationships, 1960-61," University of California, Berkeley, July 1961 (Giannini Foundation Research Report No. 246). This study is revised annually to include data for an additional year.

PART II: Statistical Supplement



INTRODUCTION

These tables contain secondary data taken from or based upon information assembled and published by governmental and private agencies. Sources listed in the tables indicate the publications from which data were compiled. These sources may be consulted to obtain more detailed information, revisions, and current data.

Averages (usually for five-year periods) are used often. Many tables also show annual data for recent years and contain a few blank lines so that the user can enter data for later years. The unit or basis appearing in the source publication is changed for some tables. For example, exports are converted from units of 1,000 pounds to tons, county data are grouped by districts, and percentages are computed.

Several adjustments are made. Derived figures (such as percentages, averages, and yields) are computed from unrounded data and may, of course, vary somewhat from the results indicated by the rounded data shown in tables. When percentage distributions (of district shipments, weekly auction sales, etc.) are determined their sums do not always total 100.0% exactly because of rounding. Similarly, five-year averages of shipments rounded to the nearest car for each district do not necessarily exactly equal the average (rounded) of the five annual state totals. In such cases data for the components are modified slightly to give "accurate" totals.

Tables of this statistical compilation are arranged in five sections. These are grouped in approximately the order indicated by the discussion in Part I. For the sake of brevity, the "list of tables" indicates short titles and gives only one listing for tables containing similar data.

TABLE 1

California Pears, All: Production, Acreage, and Yields, 1910-60

Crop year	Production		Acreage			Yield per bearing acre
	Total	Of no value	Bearing	Non-bearing	Total	
1	2	3	4	5	6	7
	tons			acres		tons
Average						
1910-14	64,000	0				
1915-19	88,200	0				
1920-24	123,000	0	37,444	32,848	70,292	3.30
1925-29	196,400	800	56,681	29,317	85,998	3.49
1930-34	238,400	31,600	65,253	12,328	77,581	3.65
1935-39	234,000	7,000	53,567	5,636	59,203	4.40
1940-44	246,800	3,800	45,647	2,848	48,495	5.41
1945-49	324,600	7,200	43,250	2,408	45,658	7.52
1950-54	348,000	0	39,377	4,057	43,434	8.84
1955-59	388,400	3,000	38,569	6,437	45,006	10.06
Annual						
1930	273,000	31,000	65,785	17,367	83,152	4.15
1931	219,000	15,000	65,965	14,089	80,054	3.32
1932	244,000	63,000	66,774	11,697	78,471	3.65
1933	222,000	40,000	65,595	10,074	75,669	3.38
1934	234,000	9,000	62,144	8,415	70,559	3.77
1935	165,000	0	57,447	7,544	64,991	2.87
1936	241,000	0	54,215	6,328	60,543	4.45
1937	227,000	12,000	53,642	5,527	59,169	4.23
1938	284,000	18,000	52,234	4,754	56,988	5.44
1939	253,000	5,000	50,297	4,026	54,323	5.03
1940	226,000	9,000	46,822	3,642	50,464	4.83
1941	223,000	0	45,611	2,940	48,551	4.89
1942	234,000	2,000	45,335	2,935	48,270	5.16
1943	301,000	5,000	45,238	2,591	47,829	6.65
1944	250,000	3,000	45,228	2,134	47,362	5.53
1945	341,000	8,000	44,885	2,018	46,903	7.60
1946	310,000	0	44,349	1,960	46,309	6.99
1947	345,000	0	43,309	2,197	45,506	7.97
1948	256,000	0	42,539	2,639	45,178	6.02
1949	371,000	28,000	41,170	3,225	44,395	9.01
1950	332,000	0	39,770	3,487	43,257	8.35
1951	352,000	0	39,756	3,930	43,686	8.85
1952	371,000	0	39,477	4,316	43,793	9.40
1953	283,000	0	38,855	4,315	43,170	7.28
1954	402,000	0	39,029	4,237	43,266	10.30
1955	347,000	0	38,806	4,849	43,655	8.94
1956	425,000	0	38,583	5,195	43,778	11.02
1957	418,000	15,000	38,691	5,527	44,218	10.80
1958	347,000	0	38,325	7,244	45,569	9.00
1959	405,000	0	38,438	9,369	47,807	10.54
1960	363,000	0	36,260	10,316	46,576	10.01
1961						
1962						
1963						

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 2

California Pears, Bartlett: Production, Acreage, and Yields, 1920-60

Crop year	Production		Acreage			Yield per bearing acre
	Total	Of no value	Bearing	Non- bearing	Total	
1	2	3	4	5	6	7
	tons		acres			tons
<u>Average</u>						
1920-24	112,400	0	33,898	29,179	63,077	3.33
1925-29	179,600	800	50,958	24,539	75,497	3.55
1930-34	208,800	28,600	56,841	10,242	67,083	3.67
1935-39	202,800	5,600	45,229	4,367	49,596	4.52
1940-44	219,800	3,000	38,991	2,282	41,273	5.64
1945-49	281,600	5,800	37,073	2,114	39,187	7.61
1950-54	306,400	0	34,452	3,727	38,179	8.89
1955-59	347,200	2,400	34,223	5,904	40,127	10.13
<u>Annual</u>						
1930	241,000	30,000	57,850	14,525	72,375	4.17
1931	194,000	15,000	57,520	11,787	69,307	3.37
1932	217,000	59,000	58,209	9,687	67,896	3.73
1933	192,000	33,000	57,043	8,322	65,365	3.37
1934	200,000	6,000	53,582	6,891	60,473	3.73
1935	147,000	0	49,166	6,033	55,199	2.99
1936	210,000	0	45,897	4,896	50,793	4.58
1937	201,000	10,000	45,145	4,199	49,344	4.45
1938	236,000	16,000	43,748	3,656	47,404	5.39
1939	220,000	2,000	42,189	3,049	45,238	5.21
1940	190,000	5,000	39,561	2,852	42,413	4.80
1941	206,000	0	39,008	2,342	41,350	5.28
1942	212,000	2,000	38,881	2,336	41,217	5.45
1943	271,000	5,000	38,803	2,138	40,941	6.98
1944	220,000	3,000	38,704	1,744	40,448	5.68
1945	295,000	8,000	38,415	1,701	40,116	7.68
1946	268,000	0	37,894	1,662	39,556	7.07
1947	296,000	0	37,120	1,949	39,069	7.97
1948	226,000	0	36,471	2,368	38,839	6.20
1949	323,000	21,000	35,464	2,889	38,353	9.12
1950	296,000	0	34,529	3,138	37,667	8.57
1951	304,000	0	34,639	3,581	38,220	8.78
1952	335,000	0	34,452	3,978	38,430	9.72
1953	239,000	0	34,201	4,009	38,210	6.99
1954	358,000	0	34,440	3,931	38,371	10.39
1955	309,000	0	34,238	4,000	38,238	9.03
1956	375,000	0	34,127	4,411	38,538	10.99
1957	372,000	12,000	34,277	5,203	39,480	10.85
1958	314,000	0	34,073	6,976	41,049	9.16
1959	366,000	0	34,399	8,928	43,327	10.64
1960	331,000	0	32,489	9,916	42,405	10.19
1961						
1962						
1963						

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 3

California Pears, Other Than Bartlett: Production, Acreage, and Yields, 1920-60

Crop year	Production		Acreage			Yield per bearing acre
	Total	Of no value	Bearing	Non- bearing	Total	
1	2	3	4	5	6	7
	tons			acres		tons
Average						
1920-24	10,600	0	3,546	3,669	7,215	2.96
1925-29	16,800	0	5,723	4,778	10,501	2.99
1930-34	29,600	3,000	8,412	2,086	10,498	3.52
1935-39	31,200	1,400	8,338	1,269	9,607	3.74
1940-44	27,000	800	6,656	566	7,222	4.04
1945-49	43,000	1,400	6,177	294	6,471	6.98
1950-54	41,600	0	4,925	330	5,255	8.49
1955-59	41,200	600	4,346	533	4,879	9.48
Annual						
1930	32,000	1,000	7,935	2,842	10,777	4.03
1931	25,000	0	8,445	2,302	10,747	2.96
1932	27,000	4,000	8,565	2,010	10,575	3.15
1933	30,000	7,000	8,552	1,752	10,304	3.51
1934	34,000	3,000	8,562	1,524	10,086	3.97
1935	18,000	0	8,281	1,511	9,792	2.17
1936	31,000	0	8,318	1,432	9,750	3.73
1937	26,000	2,000	8,497	1,328	9,825	3.06
1938	48,000	2,000	8,486	1,098	9,584	5.66
1939	33,000	3,000	8,108	977	9,085	4.07
1940	36,000	4,000	7,261	790	8,051	4.96
1941	17,000	0	6,603	598	7,201	2.57
1942	22,000	0	6,454	599	7,053	3.41
1943	30,000	0	6,435	453	6,888	4.66
1944	30,000	0	6,524	390	6,914	4.60
1945	46,000	0	6,470	317	6,787	7.11
1946	42,000	0	6,455	298	6,753	6.51
1947	49,000	0	6,189	248	6,437	7.92
1948	30,000	0	6,068	271	6,339	4.94
1949	48,000	7,000	5,706	336	6,042	8.41
1950	36,000	0	5,241	349	5,590	6.87
1951	48,000	0	5,117	349	5,466	9.38
1952	36,000	0	5,025	338	5,363	7.16
1953	44,000	0	4,654	306	4,960	9.45
1954	44,000	0	4,589	306	4,895	9.59
1955	38,000	0	4,568	849	5,417	8.32
1956	50,000	0	4,456	784	5,240	11.22
1957	46,000	3,000	4,414	324	4,738	10.42
1958	33,000	0	4,252	268	4,520	7.76
1959	39,000	0	4,039	441	4,480	9.66
1960	32,000	0	3,771	400	4,171	8.49
1961						
1962						
1963						

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 4

California Pears, Hardy: Production, Acreage, and Yields, 1920-60

Crop year	Production		Acreage a/			Yield per bearing acre
	Total	Of no value	Bearing	Non-bearing	Total	
1	2	3	4	5	6	7
	tons		acres			tons
<u>Average</u>						
1920-24	2,550	0				
1925-29 ^{b/}	4,480	0				
1930-34 ^{b/}	8,240	240				
1935-39	12,960	540	2,329	482	2,811	5.47
1940-44	13,020	140	2,178	137	2,315	5.94
1945-49	19,200	1,100	2,025	117	2,143	9.50
1950-54	21,500	0	1,936	203	2,139	11.13
1955-59	21,580	480	1,926	188	2,114	11.21
<u>Annual</u>						
1935	6,400	0	(2,190)	(590)	(2,780)	(2.92)
1936	10,000	0	2,205	568	2,773	4.54
1937	10,000	700	2,291	520	2,811	4.36
1938	22,400	1,000	2,457	405	2,862	9.12
1939	16,000	1,000	2,504	325	2,829	6.39
1940	18,000	700	2,506	249	2,755	7.18
1941	7,300	0	2,110	158	2,268	3.46
1942	10,100	0	2,093	126	2,219	4.83
1943	15,000	0	2,073	87	2,160	8.24
1944	14,700	0	2,107	65	2,172	6.98
1945	22,000	0	2,049	59	2,108	10.74
1946	17,000	0	2,099	71	2,170	8.10
1947	22,100	0	2,008	128	2,136	11.01
1948	12,400	0	2,018	159	2,177	6.14
1949	22,500	5,500	1,953	169	2,122	11.52
1950	16,700	0	1,978	242	2,220	8.44
1951	24,500	0	1,954	234	2,188	12.54
1952	19,000	0	1,964	192	2,156	9.67
1953	24,600	0	1,894	168	2,062	12.99
1954	22,700	0	1,890	178	2,068	12.01
1955	20,800	0	1,945	215	2,160	10.69
1956	24,600	0	1,928	201	2,129	12.76
1957	22,000	2,400	1,914	212	2,126	11.49
1958	20,800	0	1,886	161	2,047	11.03
1959	19,700	0	1,958	152	2,110	10.06
1960	18,100	0	1,849	118	1,967	9.79
1961						
1962						
1963						

a/ Acreages are the unrevised data from the second source and may be a little high, especially for the first 10 years or so. Acreages for 1935 are estimates made by the author to permit getting 1935-39 averages.

b/ Annual production was: 1930-8,000; 1931-7,300; 1932-7,100; 1933-8,200; 1934-10,600. Economic abandonment was 600 in 1932 and in 1934.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956; and "Acreage Estimates, California Fruit and Nut Crops," annual issues (1936 to 1960); supplemented by later reports.

TABLE 5

California Pears, Other Than Bartlett and Hardy:
Production, Acreage, and Yields, 1920-60

Crop year	Production		Acreage a/			Yield per bearing acre
	Total	Of no value	Bearing	Non- bearing	Total	
1	2	3	4	5	6	7
	tons		acres			tons
<u>Average</u>						
1920-24	8,050	0				
1925-29	12,320	0				
1930-34	21,360	2,760				
1935-39	18,240	860	6,008	788	6,796	3.04
1940-44	13,980	660	4,478	429	4,907	3.12
1945-49	23,800	300	4,152	177	4,329	5.75
1950-54	20,100	0	2,989	127	3,116	6.76
1955-59	19,620	120	2,420	345	2,765	8.22
<u>Annual</u>						
1930	24,000	1,000				
1931	17,700	0				
1932	19,900	3,400				
1933	21,800	7,000				
1934	23,400	2,400				
1935	11,600	0	(6,091)	(921)	(7,012)	(1.90)
1936	21,000	0	6,113	864	6,977	3.44
1937	16,000	1,300	6,206	808	7,014	2.58
1938	25,600	1,000	6,029	693	6,722	4.25
1939	17,000	2,000	5,604	652	6,256	3.03
1940	18,000	3,300	4,755	541	5,296	3.79
1941	9,700	0	4,493	440	4,933	2.16
1942	11,900	0	4,361	473	4,834	2.73
1943	15,000	0	4,362	366	4,728	3.44
1944	15,300	0	4,417	325	4,742	3.46
1945	24,000	0	4,421	258	4,679	5.43
1946	25,000	0	4,356	227	4,583	5.74
1947	26,900	0	4,181	120	4,301	6.43
1948	17,600	0	4,050	112	4,162	4.35
1949	25,500	1,500	3,753	167	3,920	6.79
1950	19,300	0	3,263	107	3,370	5.91
1951	23,500	0	3,163	115	3,278	7.43
1952	17,000	0	3,061	146	3,207	5.55
1953	19,400	0	2,760	138	2,898	7.03
1954	21,300	0	2,699	128	2,827	7.89
1955	17,200	0	2,623	634	3,257	6.56
1956	25,400	0	2,528	583	3,111	10.04
1957	24,000	600	2,500	112	2,612	9.60
1958	12,200	0	2,366	107	2,473	5.16
1959	19,300	0	2,081	289	2,370	9.74
1960	13,900	0	1,922	282	2,204	7.23
1961						
1962						
1963						

a/ Computed by author as differences between corresponding data in tables 3 and 4.
Also see note to table 4.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 5A

California Pears: Actual and Estimated Yield, 1935-61

Year and measure	All Pears			Bartlett Pears			Other Pears		
	Actual yield	Estimated yield ^a	Difference	Actual yield	Estimated yield ^a	Difference	Actual yield	Estimated yield ^a	Difference
1	2	3	4	5	6	7	8	9	10
tons per bearing acre									
1935	2.87	3.84	-.97	2.99	4.00	-1.01	2.17	2.98	-.81
1936	4.45	4.12	.33	4.58	4.27	.31	3.73	3.27	.46
1937	4.23	4.40	-.17	4.45	4.55	-.10	3.06	3.56	-.50
1938	5.44	4.68	.76	5.39	4.82	.57	5.66	3.84	1.82
1939	5.03	4.96	.07	5.21	5.10	.11	4.07	4.13	-.06
1940	4.83	5.24	-.41	4.80	5.38	-.58	4.96	4.42	.54
1941	4.89	5.52	-.63	5.28	5.65	-.37	2.57	4.71	-2.14
1942	5.16	5.80	-.64	5.45	5.93	-.48	3.41	5.00	-1.59
1943	6.65	6.08	.57	6.98	6.20	.78	4.66	5.28	-.62
1944	5.53	6.35	-.82	5.68	6.48	-.80	4.60	5.57	-.97
1945	7.60	6.63	.97	7.68	6.76	.92	7.11	5.86	1.25
1946	6.99	6.91	.08	7.07	7.03	.04	6.51	6.15	.36
1947	7.97	7.19	.78	7.97	7.31	.66	7.92	6.44	1.48
1948	6.02	7.47	-1.45	6.20	7.58	-1.38	4.94	6.72	-1.78
1949	9.01	7.75	1.26	9.12	7.86	1.26	8.41	7.01	1.40
1950	8.35	8.03	.32	8.57	8.14	.43	6.87	7.30	-.43
1951	8.85	8.31	.54	8.78	8.41	.37	9.38	7.59	1.79
1952	9.40	8.59	.81	9.72	8.69	1.03	7.16	7.88	-.72
1953	7.28	8.86	-1.58	6.99	8.96	-1.97	9.45	8.16	1.29
1954	10.30	9.14	1.16	10.39	9.24	1.15	9.59	8.45	1.14
1955	8.94	9.42	-.48	9.03	9.52	-.49	8.32	8.74	-.42
1956	11.02	9.70	1.32	10.99	9.79	1.20	11.22	9.03	2.19
1957	10.80	9.98	.82	10.85	10.07	.78	10.42	9.32	1.10
1958	9.00	10.26	-1.26	9.16	10.34	-1.18	7.76	9.60	-1.84
1959	10.54	10.54	0	10.64	10.62	.02	9.66	9.89	-.23
1960	10.01	10.82	-.81	10.19	10.90	-.71	8.49	10.18	-1.69
1961	10.47	11.10	-.63	10.60	11.17	-.57	9.44	10.47	-1.03
statistical measures ^b									
M	7.468			7.584			6.724		
SD	2.376			2.354			2.621		
a	10.8182			10.8945			10.1821		
b	.2792			.2759			.2882		
t	13.20			12.96			9.12		
S	.856			.861			1.280		
r	.933			.931			.873		
r ²	.870			.866			.762		

a/ Estimated by the linear regression equation $Y = a + bX$, where X is time, in years, with origin at 1960, and the constants a and b have the values tabulated in the bottom portion of the table.

b/ The 27 annual yields (tabulated in the top portion of the table) are used to determine, by the method of least squares the "best" linear trend for the period 1935-61. The symbols represent the following measures: M--mean; SD--standard deviation; a and b --constant term and regression coefficient in the equation; t -- t -ratio for b ; S --standard error of estimate; r --correlation coefficient; r^2 --coefficient of determination.

Source: Actual yield data come from California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955" (Spec. Pub. 261), July 1956, supplemented by later reports. Yields for 1961 are preliminary.

TABLE 6

California Pears, All: Disposition of Production of Value, 1910-60

Crop year	Farm disposition		Marketed fresh			Processed	
	Farm use	Total sold ^{a/}	Total	Out of state	Within state	Canned ^{b/}	Dried
1	2	3	4	5	6	7	8
tons, fresh weight							
<u>Average</u>							
1910-14	1,640	62,360	35,060	31,400	3,660	19,340	7,960
1915-19	2,100	86,100	53,140	48,760	4,380	23,720	9,240
1920-24	2,400	120,600	71,900	66,560	5,340	33,240	15,460
1925-29	2,320	193,280	115,240	104,320	10,920	54,960	23,080
1930-34	1,700	205,100	125,260	102,400	22,860	51,000	28,840
1935-39	1,320	225,680	121,330	95,840	25,540	68,820	35,480
1940-44	1,300	241,700	96,060	69,620	26,440	126,220	18,200
1945-49	1,280	316,120	120,640	91,260	29,380	180,240	14,840
1950-54	1,200	346,800	101,820	79,540	22,280	235,680	9,300
1955-59	1,140	384,260	101,240	78,340	22,900	273,300	9,720
<u>Annual</u>							
1930	2,000	240,000	165,900	144,300	21,600	49,300	24,800
1931	1,700	202,300	130,700	107,600	23,100	47,600	24,000
1932	1,700	179,300	112,000	88,700	23,300	37,300	30,000
1933	1,600	180,400	91,400	71,000	20,400	50,700	38,300
1934	1,500	223,500	126,300	100,400	25,900	70,100	27,100
1935	1,400	163,600	93,600	69,000	24,600	36,400	33,600
1936	1,300	239,700	120,100	95,500	24,600	75,000	44,600
1937	1,300	213,700	117,900	98,300	19,600	76,600	19,200
1938	1,300	264,700	158,800	129,000	29,800	70,500	35,400
1939	1,300	246,700	116,500	87,400	29,100	85,600	44,600
1940	1,300	215,700	102,000	76,900	25,100	96,700	17,000
1941	1,300	221,700	77,400	52,700	24,700	124,200	20,100
1942	1,300	230,700	77,200	54,100	23,100	139,000	14,500
1943	1,300	294,700	126,500	99,300	27,200	141,700	20,400
1944	1,300	245,700	97,200	65,100	32,100	129,500	19,000
1945	1,300	331,700	162,000	124,800	37,200	144,900	24,300
1946	1,300	308,700	125,900	94,800	31,100	161,900	20,300
1947	1,300	343,700	128,600	99,500	29,100	203,000	12,100
1948	1,300	254,700	53,000	32,100	20,900	195,500	5,300
1949	1,200	341,800	133,700	105,100	28,600	195,900	12,200
1950	1,200	330,800	95,000	74,500	20,500	228,800	7,000
1951	1,200	350,800	97,100	75,700	21,400	245,100	8,600
1952	1,200	369,800	125,700	101,100	24,600	235,700	8,400
1953	1,200	281,800	81,400	61,900	19,500	194,100	6,300
1954	1,200	400,800	109,900	84,500	25,400	274,700	16,200
1955	1,200	345,800	82,100	61,000	21,100	251,300	12,400
1956	1,200	423,800	108,100	84,400	23,700	306,100	9,600
1957	1,200	401,800	115,200	89,700	25,500	276,100	10,500
1958	1,100	345,900	93,500	71,600	21,900	246,300	6,100
1959	1,000	404,000	107,300	85,000	22,300	286,700	10,000
1960	1,000	362,000	88,800	70,500	18,300	264,400	8,800
1961							
1962							
1963							

^{a/} ^{b/} See notes to tables 7 and 8.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 7

California Pears, Bartlett: Disposition of Production of Value, 1920-60

Crop year	Farm disposition		Marketed fresh			Processed	
	Farm use	Total sold a/	Total	Out of state	Within state	Canned ^{b/}	Dried
1	2	3	4	5	6	7	8
tons, fresh weight							
<u>Average</u>							
1920-24	2,260	110,140	61,440	56,540	4,900	33,240	15,460
1925-29	2,100	176,700	98,660	88,940	9,720	54,960	23,080
1930-34	1,500	178,700	98,860	78,480	20,380	51,000	28,840
1935-39	1,120	195,080	92,100	70,100	22,000	68,540	35,440
1940-44	1,100	215,700	81,880	60,140	21,740	114,560	18,120
1945-49	1,080	274,720	100,500	76,400	24,100	159,720	14,160
1950-54	1,000	305,400	88,620	70,520	18,100	207,480	9,300
1955-59	940	343,860	84,160	65,840	18,320	249,980	9,720
<u>Annual</u>							
1930	1,800	209,200	135,100	116,100	19,000	49,300	24,800
1931	1,500	177,500	105,900	84,900	21,000	47,600	24,000
1932	1,500	156,500	89,200	68,400	20,800	37,300	30,000
1933	1,400	157,600	68,600	50,700	17,900	50,700	38,300
1934	1,300	192,700	95,500	72,300	23,200	70,100	27,100
1935	1,200	145,800	76,200	53,800	22,400	36,000	33,600
1936	1,100	208,900	90,000	68,500	21,500	74,500	44,400
1937	1,100	189,900	94,600	77,600	17,000	76,100	19,200
1938	1,100	218,900	113,000	88,000	25,000	70,500	35,400
1939	1,100	216,900	86,700	62,600	24,100	85,600	44,600
1940	1,100	183,900	80,700	62,200	18,500	86,300	16,900
1941	1,100	204,900	71,100	49,900	21,200	113,700	20,100
1942	1,100	208,900	66,600	48,000	18,600	128,000	14,300
1943	1,100	264,900	109,300	86,200	23,100	129,600	20,300
1944	1,100	215,900	81,700	54,400	27,300	115,200	19,000
1945	1,100	285,900	137,100	107,200	29,900	125,900	22,700
1946	1,100	266,900	104,000	76,500	27,500	143,800	18,500
1947	1,100	294,900	101,400	76,500	24,900	181,400	12,100
1948	1,100	224,900	42,900	26,500	16,400	175,800	5,300
1949	1,000	301,000	117,100	95,300	21,800	171,700	12,200
1950	1,000	295,000	85,500	69,200	16,300	202,500	7,000
1951	1,000	303,000	80,500	64,000	16,500	213,900	8,600
1952	1,000	334,000	114,600	93,600	21,000	211,000	8,400
1953	1,000	238,000	69,400	53,900	15,500	162,300	6,300
1954	1,000	357,000	93,100	71,900	21,200	247,700	16,200
1955	1,000	308,000	68,400	52,300	16,100	227,200	12,400
1956	1,000	374,000	86,000	68,000	18,000	278,400	9,600
1957	1,000	359,000	94,100	74,700	19,400	254,400	10,500
1958	900	313,100	83,400	64,400	19,000	223,600	6,100
1959	800	365,200	88,900	69,800	19,100	266,300	10,000
1960	800	330,200	76,000	61,000	15,000	245,400	8,800
1961							
1962							
1963							

a/ Includes (not shown separately) 5,500 tons crushed in 1943 and tons frozen: 1943-200; 1945-200; 1946-600; 1948-900.

b/ Includes quantity used for canned fruit cocktail, fruit salad, other mixed fruits, baby food, puree, nectar, juice, and preserves.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 8

California Pears, Other than Bartlett: Disposition of Production of Value, 1920-60

Crop year	Farm disposition		Marketed fresh			Processed	
	Farm use	Total sold ^a /	Total	Out of state	Within state	Canned ^b /	Dried
1	2	3	4	5	6	7	8
tons, fresh weight							
<u>Average</u>							
1920-24	140	10,460	10,460	10,020	440	0	0
1925-29	220	16,580	16,580	15,380	1,200	0	0
1930-34	200	26,400	26,400	23,920	2,480	0	0
1935-39	200	29,600	29,280	25,740	3,540	280	40
1940-44	200	26,000	14,180	9,480	4,700	11,660	80
1945-49	200	41,400	20,140	14,860	5,280	20,520	680
1950-54	200	41,400	13,200	8,760	4,440	28,200	0
1955-59	200	40,400	17,080	12,500	4,580	23,320	0
<u>Annual</u>							
1930	200	30,800	30,800	28,200	2,600	0	0
1931	200	24,800	24,800	22,700	2,100	0	0
1932	200	22,800	22,800	20,300	2,500	0	0
1933	200	22,800	22,800	20,300	2,500	0	0
1934	200	30,800	30,800	28,100	2,700	0	0
1935	200	17,800	17,400	15,200	2,200	400	0
1936	200	30,800	30,100	27,000	3,100	500	200
1937	200	23,800	23,300	20,700	2,600	500	0
1938	200	45,800	45,800	41,000	4,800	0	0
1939	200	29,800	29,800	24,800	5,000	0	0
1940	200	31,800	21,300	14,700	6,600	10,400	100
1941	200	16,800	6,300	2,800	3,500	10,500	0
1942	200	21,800	10,600	6,100	4,500	11,000	200
1943	200	29,800	17,200	13,100	4,100	12,100	100
1944	200	29,800	15,500	10,700	4,800	14,300	0
1945	200	45,800	24,900	17,600	7,300	19,000	1,600
1946	200	41,800	21,900	18,300	3,600	18,100	1,800
1947	200	48,800	27,200	23,000	4,200	21,600	0
1948	200	29,800	10,100	5,600	4,500	19,700	0
1949	200	40,800	16,600	9,800	6,800	24,200	0
1950	200	35,800	9,500	5,300	4,200	26,300	0
1951	200	47,800	16,600	11,700	4,900	31,200	0
1952	200	35,800	11,100	7,500	3,600	24,700	0
1953	200	43,800	12,000	8,000	4,000	31,800	0
1954	200	43,800	16,800	11,300	5,500	27,000	0
1955	200	37,800	13,700	8,700	5,000	24,100	0
1956	200	49,800	22,100	16,400	5,700	27,700	0
1957	200	42,800	21,100	15,000	6,100	21,700	0
1958	200	32,800	10,100	7,200	2,900	22,700	0
1959	200	38,800	18,400	15,200	3,200	20,400	0
1960	200	31,800	12,800	9,500	3,300	19,000	0
1961							
1962							
1963							

^a/ Includes tons crushed (not shown separately): 1943-400; 1945-300.^b/ Includes quantity used for canned fruit cocktail, puree, baby food, etc.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 9

California Pears, Hardy: Disposition of Production of Value, 1920-60

Crop year	Farm disposition		Marketed fresh			Processed	
	Farm use	Total sold	Total	Out of state	Within state	Canned ^{a/}	Dried
1	2	3	4	5	6	7	8
tons, fresh weight							
Average							
1920-24	70	2,480	2,480	2,380	100	0	0
1925-29	100	4,380	4,380	4,200	180	0	0
1930-34	100	7,900	7,900	7,700	200	0	0
1935-39	100	12,320	12,320	11,760	560	0	0
1940-44	100	12,780	3,170	2,760	410	9,610	0
1945-49	100	18,000	2,700	2,260	440	15,140	160
1950-54	80	21,420	240	200	40	21,180	0
1955-59	70	21,030	730			20,300	0
Annual							
1930	100	7,900	7,900	7,700	200	0	
1931	100	7,200	7,200	7,000	200	0	
1932	100	6,400	6,400	6,200	200	0	
1933	100	8,100	8,100	7,900	200	0	
1934	100	9,900	9,900	9,700	200	0	
1935	100	6,300	6,300	6,100	200	0	
1936	100	9,900	9,900	9,500	400	0	
1937	100	9,200	9,200	9,000	200	0	
1938	100	21,300	21,300	21,000	300	0	
1939	100	14,900	14,900	13,200	1,700	0	
1940	100	17,200	9,700	8,900	800	7,500	
1941	100	7,200	250	100	150	6,950	
1942	100	10,000	200	100	100	9,800	
1943	100	14,900	3,200	3,000	200	11,700	
1944	100	14,600	2,500	1,700	800	12,100	
1945	100	21,900	4,300	3,400	900	17,100	500
1946	100	16,900	2,200	1,500	700	14,400	300
1947	100	22,000	6,100	5,800	300	15,900	
1948	100	12,300	200	100	100	12,100	
1949	100	16,900	700	500	200	16,200	
1950	100	16,600	100	0	100	16,500	
1951	50	24,450	50	0	50	24,400	
1952	50	18,950	450	400	50	18,500	
1953	100	24,500	500	500	0	24,000	
1954	100	22,600	100	100	0	22,500	
1955	100	20,700	100	100	0	20,600	
1956	50	24,550	50			24,500	
1957	100	19,500	1,400			18,100	
1958	100	20,700	800			19,900	
1959	0	19,700	1,300			18,400	
1960	100	18,000	800			17,200	
1961							
1962							
1963							

^{a/} Includes quantity used for canned fruit cocktail, puree, baby food, etc.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 241), July 1956, supplemented by later reports.

TABLE 10

California Pears, Other than Bartlett and Hardy:
Disposition of Production of Value, 1920-60

Crop year	Farm disposition		Marketed fresh			Processed	
	Farm use	Total sold ^{a/}	Total	Out of state	Within state	Canned ^{b/}	Dried
1	2	3	4	5	6	7	8
tons, fresh weight							
<u>Average</u>							
1920-24	70	7,980	7,980	7,640	340	0	0
1925-29	120	12,200	12,200	11,180	1,020	0	0
1930-34	100	18,500	18,500	16,220	2,280	0	0
1935-39	100	17,280	16,960	13,980	2,980	280	40
1940-44	100	13,220	11,010	6,720	4,290	2,050	80
1945-49	100	23,400	17,440	12,600	4,840	5,380	520
1950-54	120	19,980	12,960	8,560	4,400	7,020	0
1955-59	130	19,370	16,350			3,020	0
<u>Annual</u>							
1930	100	22,900	22,900	20,500	2,400	0	0
1931	100	17,600	17,600	15,700	1,900	0	0
1932	100	16,400	16,400	14,100	2,300	0	0
1933	100	14,700	14,700	12,400	2,300	0	0
1934	100	20,900	20,900	18,400	2,500	0	0
1935	100	11,500	11,100	9,100	2,000	400	0
1936	100	20,900	20,200	17,500	2,700	500	200
1937	100	14,600	14,100	11,700	2,400	500	0
1938	100	24,500	24,500	20,000	4,500	0	0
1939	100	14,900	14,900	11,600	3,300	0	0
1940	100	14,600	11,600	5,800	5,800	2,900	100
1941	100	9,600	6,050	2,700	3,350	3,550	0
1942	100	11,800	10,400	6,000	4,400	1,200	200
1943	100	14,900	14,000	10,100	3,900	400	100
1944	100	15,200	13,000	9,000	4,000	2,200	0
1945	100	23,900	20,600	14,200	6,400	1,900	1,100
1946	100	24,900	19,700	16,800	2,900	3,700	1,500
1947	100	26,800	21,100	17,200	3,900	5,700	0
1948	100	17,500	9,900	5,500	4,400	7,600	0
1949	100	23,900	15,900	9,300	6,600	8,000	0
1950	100	19,200	9,400	5,300	4,100	9,800	0
1951	150	23,350	16,550	11,700	4,850	6,800	0
1952	150	16,850	10,650	7,100	3,550	6,200	0
1953	100	19,300	11,500	7,500	4,000	7,800	0
1954	100	21,200	16,700	11,200	5,500	4,500	0
1955	100	17,100	13,600	8,600	5,000	3,500	0
1956	150	25,250	22,050			3,200	0
1957	100	23,300	19,700			3,600	0
1958	100	12,100	9,300			2,800	0
1959	200	19,100	17,100			2,000	0
1960	100	13,800	12,000			1,800	0
1961							
1962							
1963							

^{a/} Includes tons crushed (not shown separately): 1943-400; 1945-300.

^{b/} Includes quantity used for canned fruit cocktail, puree, baby food, etc.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 11
California Pears, All: Returns to Growers,^{a/} by Use, 1910-60

Crop year	All uses		Marketed fresh			Processed	
	Per bearing acre b/	Per ton	Total	Out of state	Within state	Canned	Dried
1	2	3	4	5	6	7	8
dollars per fresh ton							
Average							
1910-14		37.90	38.30	38.20	39.20	40.80	26.44
1915-19		57.42	63.54	64.28	54.02	51.20	35.94
1920-24	216.60	65.96	73.96	74.76	64.66	60.40	37.08
1925-29	180.00	52.94	57.06	57.84	50.72	51.00	35.40
1930-34	80.92	24.94	27.02	28.04	23.08	22.40	20.22
1935-39	103.76	25.04	27.14	27.48	25.78	23.38	21.38
1940-44	326.20	59.14	67.98	68.30	67.18	54.98	42.50
1945-49	560.60	79.14	81.08	80.74	82.62	78.26	59.14
1950-54	645.20	73.20	81.34	80.60	84.28	69.42	73.12
1955-59	737.60	73.62	82.22	82.66	82.16	70.14	87.00
Annual							
1930	91.00	24.80	24.20	24.30	24.00	29.00	20.40
1931	90.00	29.20	35.20	36.80	27.70	17.00	20.40
1932	40.00	14.70	14.60	14.30	15.80	14.00	15.60
1933	62.60	22.60	26.70	28.80	19.50	17.00	20.00
1934	121.00	33.40	34.40	36.00	28.40	35.00	24.70
1935	85.20	29.70	32.10	33.10	29.10	28.90	24.00
1936	117.00	26.40	29.50	29.20	30.60	24.00	22.20
1937	115.00	28.70	34.30	35.50	28.20	23.00	17.80
1938	69.60	13.70	12.30	12.00	13.80	14.00	18.90
1939	132.00	26.70	27.50	27.60	27.20	27.00	24.00
1940	120.00	25.90	26.20	26.20	26.40	26.60	20.00
1941	198.00	40.60	43.10	43.20	43.00	41.40	25.40
1942	328.00	64.20	69.80	71.50	65.60	62.90	45.30
1943	510.00	77.90	99.40	99.70	98.30	64.00	60.00
1944	475.00	87.10	101.40	100.90	102.60	80.00	61.80
1945	593.00	79.90	89.30	88.10	93.40	72.10	63.60
1946	671.00	95.90	96.50	96.70	96.00	99.20	66.30
1947	586.00	73.60	77.90	76.80	81.70	72.30	50.00
1948	692.00	114.90	109.20	109.80	108.40	118.10	70.00
1949	261.00	31.40	32.50	32.30	33.60	29.60	45.80
1950	622.00	74.60	82.80	82.20	84.70	71.30	69.00
1951	840.00	94.90	97.10	94.70	106.00	95.00	64.00
1952	473.00	50.30	60.90	58.90	68.80	44.30	61.80
1953	521.00	71.50	83.50	85.30	78.00	66.70	65.80
1954	770.00	74.70	82.40	81.90	83.90	69.80	105.00
1955	666.00	74.50	89.90	89.60	90.50	69.80	70.00
1956	844.00	76.60	83.40	83.30	83.40	74.60	67.00
1957	704.00	65.20	75.40	70.80	76.70	60.60	76.00
1958	768.00	84.80	82.00	86.90	80.50	84.80	124.00
1959	706.00	67.00	80.40	82.70	79.70	60.90	98.00
1960	840.00	83.90	99.30	103.70	98.20	78.30	98.00
1961							
1962							
1963							

a/ Returns for naked fruit at growers' first delivery point.

b/ Computed from column 3 and columns 2 and 4 of table 1.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 12

California Pears, Bartlett: Returns to Growers,^{a/} by Use, 1920-60

Crop year	All uses		Marketed fresh			Processed	
	Per bearing acre ^{b/}	Per ton	Total	Out of state	Within state	Canned	Dried
1	2	3	4	5	6	7	8
dollars per fresh ton							
Average							
1920-24	214.20	64.26	72.40	73.00	65.00	60.40	37.08
1925-29	178.60	51.70	55.70	56.40	50.20	51.00	35.40
1930-34	82.26	25.32	28.40	29.80	23.80	22.40	20.22
1935-39	108.76	25.22	28.14	28.60	26.60	23.40	21.38
1940-44	341.60	59.38	69.04	69.28	68.50	55.36	42.54
1945-49	575.40	80.20	83.46	82.70	85.80	79.20	59.76
1950-54	658.60	74.50	84.00	82.80	89.40	70.20	73.14
1955-59	749.00	74.22	84.58	89.00	86.40	70.50	87.00
Annual							
1930	92.60	25.40	25.00	25.00	25.00	29.00	20.40
1931	89.60	28.80	36.00	38.00	28.00	17.00	20.40
1932	41.30	15.20	15.50	15.00	17.00	14.00	15.60
1933	63.80	22.90	28.90	32.00	20.00	17.00	20.00
1934	124.00	34.30	36.60	39.00	29.00	35.00	24.70
1935	87.00	29.30	31.80	33.00	29.00	29.00	24.00
1936	120.30	26.30	30.20	30.00	31.00	24.00	22.20
1937	119.30	28.20	34.60	36.00	28.00	23.00	17.80
1938	70.90	14.10	12.70	12.00	15.00	14.00	18.90
1939	145.70	28.20	31.40	32.00	30.00	27.00	24.00
1940	128.00	27.40	28.40	27.90	30.00	28.00	20.00
1941	215.00	40.80	43.50	43.50	43.50	41.80	25.45
1942	348.00	64.50	71.30	73.00	67.00	63.00	45.45
1943	529.00	77.10	99.00	99.00	99.00	64.00	60.00
1944	488.00	87.10	103.00	103.00	103.00	80.00	61.80
1945	592.00	79.30	88.30	87.00	93.00	72.00	65.00
1946	680.00	96.20	96.00	96.00	96.00	100.00	68.00
1947	597.00	74.90	81.20	80.00	85.00	73.00	50.00
1948	732.00	118.20	118.80	118.00	120.00	120.00	70.00
1949	276.00	32.40	33.00	32.50	35.00	31.00	45.80
1950	646.00	75.40	84.00	83.00	88.00	72.00	69.10
1951	861.00	98.10	104.00	101.00	118.00	97.00	64.00
1952	495.00	50.90	61.00	59.00	70.00	45.00	61.80
1953	511.00	73.10	88.10	89.00	85.00	67.00	65.80
1954	780.00	75.00	82.90	82.00	86.00	70.00	105.00
1955	686.00	76.00	96.20	95.00	100.00	70.30	70.00
1956	843.00	76.70	83.40	83.00	85.00	75.00	67.00
1957	716.00	66.00	78.60	80.00	73.00	61.00	76.00
1958	787.00	85.40	83.80	82.00	90.00	85.00	124.00
1959	713.00	67.00	80.90	80.00	84.00	61.20	98.00
1960	859.00	84.30	101.20	100.00	106.30	78.60	98.00
1961							
1962							
1963							

^{a/} Returns for naked fruit at growers' first delivery point.^{b/} Computed from col. 3 and cols. 2 and 4 of table 2.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 13

California Pears, Other Than Bartlett: Returns to Growers,^{a/} by Use, 1920-60

Crop year	All uses		Marketed fresh			Processed	
	Per bearing acre b/	Per ton	Total	Out of state	Within state	Canned	Dried
1	2	3	4	5	6	7	8
dollars per fresh ton							
<u>Average</u>							
1920-24	241.00	83.22	83.22	84.28	61.58		
1925-29	194.20	66.28	66.28	67.14	54.80		
1930-34	72.34	22.44	22.44	22.96	17.42		
1935-39	77.42	24.06	24.22	24.56	21.82		
1940-44	235.06	57.52	62.44	62.24	62.04	51.56	
1945-49	463.80	71.50	71.54	72.30	69.62	70.60	
1950-54	554.40	64.40	65.84	66.20	65.20	63.72	
1955-59	647.00	68.40	69.60	69.68	68.72	66.22	
<u>Annual</u>							
1930	81.70	20.90	20.90	21.30	16.80		
1931	93.80	31.70	31.70	32.40	24.50		
1932	30.80	11.50	11.50	12.10	6.30		
1933	54.40	20.20	20.20	20.70	15.90		
1934	101.00	27.90	27.90	28.30	23.60		
1935	71.20	32.80	33.10	33.60	30.00	20.00	
1936	101.00	27.00	27.20	27.10	28.10	20.00	18.00
1937	93.20	33.00	33.30	33.70	29.80	20.00	
1938	62.90	11.60	11.60	12.00	7.80		
1939	58.80	15.90	15.90	16.40	13.40		
1940	74.90	17.00	18.10	19.00	16.20	14.80	13.70
1941	97.40	37.80	39.00	38.20	39.70	37.00	
1942	207.00	60.80	60.00	60.00	60.00	62.00	36.30
1943	397.00	85.20	102.00	104.00	94.30	64.00	54.60
1944	399.00	86.80	93.10	90.00	100.00	80.00	
1945	594.00	83.60	95.00	95.00	95.00	73.00	44.00
1946	613.00	94.20	98.90	99.50	96.10	93.00	48.50
1947	520.00	65.70	65.40	66.00	62.00	66.00	
1948	445.00	90.10	68.80	71.00	66.00	101.00	
1949	172.00	23.90	29.60	30.00	29.00	20.00	
1950	464.00	67.60	72.00	72.00	72.00	66.00	
1951	700.00	74.60	61.50	60.00	65.00	81.60	
1952	320.00	44.60	59.30	58.00	62.00	38.00	
1953	594.00	62.80	57.00	60.00	51.00	65.00	
1954	694.00	72.40	79.40	81.00	76.00	68.00	
1955	519.00	62.40	58.30	57.30	60.00	64.80	
1956	853.00	76.00	83.20	85.00	78.00	70.30	
1957	610.00	58.50	61.20	60.00	64.00	56.00	
1958	606.00	78.10	67.30	67.50	66.60	82.90	
1959	647.00	67.00	78.00	78.60	75.00	57.10	
1960	678.00	79.90	87.90	86.50	92.00	74.60	
1961							
1962							
1963							

^{a/} Returns for naked fruit at growers' first delivery point.^{b/} Computed from column 3 and columns 2 and 4 of table 3.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 14

California Pears, Hardy: Returns to Growers,^{a/} By Use, 1920-60

Crop year	All uses		Marketed fresh			Canned
	Per bearing acre b/	Per ton	Total	Out of state	Within state	
1	2	3	4	5	6	7
dollars per fresh ton						
<u>Average</u>						
1920-24		90.98	90.98	92.40	57.40	
1925-29		70.22	70.22	71.20	47.00	
1930-34		29.62	29.62	30.00	15.60	
1935-39	139.80	29.94	29.94	30.40	18.20	
1940-44	329.70	54.24	60.46	61.16	58.46	51.88
1945-49	664.40	76.30	76.42	75.40	74.00	75.60
1950-54	758.80	66.84	66.00	64.33	62.33	66.80
<u>Annual</u>						
1930		29.60	29.60	30.00	15.00	
1931		39.40	39.40	40.00	20.00	
1932		25.50	25.50	26.00	10.00	
1933		24.80	24.80	25.00	15.00	
1934		28.80	28.80	29.00	18.00	
1935	121.00	41.30	41.30	42.00	20.00	
1936	139.00	30.60	30.60	31.00	22.00	
1937	195.00	44.60	44.60	45.00	28.00	
1938	108.00	11.90	11.90	12.00	5.00	
1939	136.00	21.30	21.30	22.00	16.00	
1940	129.00	17.90	21.00	21.30	18.30	13.90
1941	130.00	37.50	36.80	42.50	33.00	37.50
1942	299.00	62.00	60.00	60.00	60.00	62.00
1943	506.00	69.90	91.30	92.00	81.00	64.00
1944	585.00	83.90	93.20	90.00	100.00	82.00
1945	829.00	77.20	90.00	91.00	86.00	75.00
1946	791.00	97.60	89.60	94.00	80.00	100.00
1947	737.00	67.00	77.40	78.00	66.00	63.00
1948	736.00	119.80	108.00	98.00	118.00	120.00
1949	229.00	19.90	17.10	16.00	20.00	20.00
1950	591.00	70.00	72.00	--	72.00	70.00
1951	1,140.00	90.90	65.00	--	65.00	91.00
1952	351.00	36.30	50.00	50.00	50.00	36.00
1953	883.00	68.00	68.00	68.00	--	68.00
1954	829.00	69.00	75.00	75.00	--	69.00
1955	728.00	68.10	85.00	85.00	--	68.00
1956						
1957						
1958						
1959						
1960						
1961						
1962						
1963						

a/ Returns for naked fruit at growers' first delivery point. Data not published after 1955.

b/ Computed from col. 3 and cols. 2 and 4 of table 4.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization, and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports.

TABLE 15

California Bartlett Pears: Sales, Acreage, and Yield by Districts,^{a/} 1940-59

District and period	Sales				Percent canned	Bearing acreage	Yield derived ^{b/}
	Cannery	Fresh out-of-state	Fresh in-state	Total			
1	2	3	4	5	6	7	8
		tons			percent	acres	tons
North Bay Dist.							
1940-44	19,710	13,380	5,070	38,160	56.1	12,252	3.11
1945-49	30,610	16,800				11,203	
1950-54	37,480	17,720	9,280	64,480	58.1	8,840	7.29
1955-59	49,470	20,020	8,290	77,780	63.6	8,458	9.20
Santa Clara Dist.							
1940-44	35,710	70	760	36,540	97.7	5,254	6.96
1945-49	48,780	570				5,279	
1950-54	52,680	100	130	52,910	99.6	5,178	10.22
1955-59	53,680	0	160	53,840	99.7	5,451	9.88
Central Dist.							
1940-44	43,740	17,980	1,000	62,720	69.7	9,025	6.95
1945-49	44,630	21,360				8,950	
1950-54	73,230	17,120	2,570	92,920	78.8	8,643	10.75
1955-59	93,660	13,120	2,180	108,960	86.0	8,582	12.70
Mountain Dist.							
1940-44	9,620	22,880	1,640	34,140	28.1	8,903	3.84
1945-49	24,700	29,780				9,036	
1950-54	34,630	27,940	1,340	63,910	54.2	9,447	6.77
1955-59	42,300	24,940	2,690	69,930	60.5	9,674	7.23
Marysville Dist.							
1940-44	5,330	4,850	370	10,550	50.6	1,178	8.95
1945-49	5,480	5,330				1,126	
1950-54	8,490	6,830	1,500	16,820	50.5	1,093	15.39
1955-59	10,540	6,660	1,600	18,800	56.1	1,117	16.83
Other counties							
1940-44	510	630	3,350	4,490	11.3	1,888	2.38
1945-49	910	660				1,682	
1950-54	930	750	1,680	3,360	27.6	1,251	2.69
1955-59	710	1,070	2,510	4,290	16.6	941	4.56
State total							
1940-44	114,620	59,790	12,190	186,600	61.4	38,500	4.85
1945-49	155,310	74,500	24,090	253,900	61.2	37,276	6.81
1950-54	207,440	70,460	16,500	294,400	70.5	34,452	8.55
1955-59	250,360	65,810	17,430	333,600	75.0	34,223	9.75

^{a/} Data are not exactly comparable to those in other tables due to reporting differences. Sales differ mostly in under-reporting of local fresh sales in 1940-44--officially, 21,740 tons. Bearing acreages for 1940-49 are unrevised data--about equal to revised statewide totals. Counties included in districts are those listed in table 16 except that Marysville District covers the area north of Central and Mountain districts.

^{b/} Computed using five-year averages for sales and acreage, without allowances for farm use, waste, drying, and similar factors. These results are 14, 11, 4, and 4 percent, respectively, below "true" yields, as shown in table 2.

Source: Based on data from California Tree Fruit Agreement, annual reports, and California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops," annual issues.

TABLE 16

California Pears, All: Bearing Acreage by County, 1920-60

County and district	1920	1925	1930	1935	1940	1945	1950	1955	1960
1	2	3	4	5	6	7	8	9	10
All counties	29,540	48,890	65,785	57,447	46,822	44,885	39,770	38,806	36,260
<u>North Bay Dist.</u>									
Lake	800	2,800	6,100	5,200	3,744	3,843	3,705	3,942	4,274
Marin	60	160	220	210	200	202	104	29	24
Mendocino	550	750	2,600	4,000	3,768	3,151	2,086	1,938	2,077
Napa	650	1,250	2,100	1,968	1,653	1,240	983	890	658
Sonoma	1,050	1,800	2,650	3,395	3,287	2,918	2,072	1,783	1,627
Total	3,110	6,760	13,670	14,773	12,652	11,354	8,950	8,582	8,660
<u>Santa Clara Dist.</u>									
Alameda	800	1,150	755	440	402	229	59	37	32
Monterey	150	500	1,675	1,030	570	224	151	129	37
San Benito	250	635	1,119	1,202	938	807	718	719	732
San Mateo	40	170	300	200	150	139	37	40	33
Santa Clara	2,300	4,400	6,589	6,850	6,487	6,901	6,490	6,622	6,158
Santa Cruz	300	540	800	1,335	1,301	962	904	933	741
Total	3,840	7,395	11,238	11,057	9,848	9,262	8,359	8,480	7,733
<u>Central Dist.</u>									
Contra Costa	1,150	2,250	3,700	2,701	2,717	2,839	2,125	1,712	1,372
Sacramento	4,800	6,500	8,000	5,900	3,887	3,956	3,981	4,367	4,527
Solano	2,000	3,300	3,500	3,670	3,001	2,848	2,611	2,518	2,297
Yolo	1,000	1,300	1,582	660	453	391	384	361	353
Total	8,950	13,350	16,782	12,931	10,058	10,034	9,101	8,958	8,549
<u>Mountain Dist.</u>									
El Dorado	1,198	2,004	3,253	3,896	3,985	4,207	4,110	3,877	3,633
Nevada	770	1,050	1,700	1,350	981	930	953	1,001	585
Placer	2,400	3,900	6,400	5,800	5,303	5,478	5,544	5,562	4,720
Total	4,368	6,954	11,353	11,046	10,269	10,615	10,607	10,440	8,938
<u>Marysville Dist.</u>									
Butte	430	580	425	310	99	144	43	47	31
Sutter	340	525	774	330	204	190	184	208	254
Yuba	550	700	956	932	897	877	828	850	822
Total	1,320	1,805	2,155	1,572	1,200	1,211	1,055	1,105	1,107
<u>Other counties</u>									
Glenn	120	500	425	367	205	205	202	129	173
Kern	1,450	1,180	1,080	500	129	80	93	88	126
Los Angeles	1,800	4,300	4,370	2,325	835	790	557	421	289
San Diego	250	300	280	200	161	184	178	188	150
San Joaquin	550	1,200	830	605	285	157	90	74	188
San Luis Obispo	1,350	1,775	960	600	448	422	217	117	117
Balance ^a	2,432	3,371	2,642	1,471	732	571	361	224	230
Total	7,952	12,626	10,587	6,068	2,795	2,409	1,698	1,241	1,273
percent of total									
<u>District</u>									
North Bay	10.5	13.9	20.8	25.7	27.0	25.3	22.5	22.1	23.9
Santa Clara	13.0	15.1	17.1	19.3	21.0	20.6	21.0	21.9	21.3
Central	30.3	27.3	25.5	22.5	21.5	22.4	22.9	23.1	23.6
Mountain	14.8	14.2	17.2	19.2	21.9	23.6	26.7	26.9	24.6
Marysville	4.5	3.7	3.3	2.7	2.6	2.7	2.6	2.8	3.1
Other counties	26.9	25.8	16.1	10.6	6.0	5.4	4.3	3.2	3.5

^a All counties (31) not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, 1919-1953," (Spec. Pub. 257, Supp.) April 1959; and "Acreage Estimates, California Fruit and Nut Crops," as of 1955 and 1960.

TABLE 17
California Pears, Bartlett: Bearing Acreage by County, 1920-60

County and district	1920	1925	1930	1935	1940	1945	1950	1955	1960
1	2	3	4	5	6	7	8	9	10
All counties	26,530	44,470	57,850	49,166	39,561	38,415	34,529	34,238	32,489
<u>North Bay Dist.</u>									
Lake	800	2,800	6,080	5,160	3,734	3,833	3,700	3,937	4,267
Marin	60	160	220	210	200	202	104	29	24
Mendocino	525	650	2,300	3,820	3,640	3,062	2,064	1,914	2,053
Napa	650	1,250	2,100	1,953	1,637	1,233	975	881	655
Sonoma	1,050	1,800	2,630	3,325	3,212	2,883	2,063	1,783	1,621
Total	3,085	6,660	13,330	14,468	12,423	11,213	8,906	8,544	8,620
<u>Santa Clara Dist.</u>									
Alameda	750	1,100	700	400	360	211	54	31	23
Monterey	40	180	560	180	70	20	15	13	9
San Benito	100	370	510	450	283	232	240	248	275
San Mateo	40	150	215	100	93	82	24	27	33
Santa Clara	1,575	3,450	4,540	4,500	4,085	4,406	4,232	4,480	4,397
Santa Cruz	50	100	200	520	573	583	617	634	558
Total	2,555	5,350	6,725	6,150	5,464	5,534	5,182	5,433	5,295
<u>Central Dist.</u>									
Contra Costa	1,100	2,200	3,525	2,561	2,576	2,619	1,917	1,584	1,236
Sacramento	4,600	6,250	7,750	5,675	3,691	3,745	3,805	4,181	4,341
Solano	1,800	3,050	3,130	3,200	2,530	2,495	2,368	2,409	2,250
Yolo	1,000	1,300	1,570	648	441	386	379	361	353
Total	8,500	12,800	15,975	12,084	9,238	9,245	8,469	8,535	8,180
<u>Mountain Dist.</u>									
El Dorado	1,023	1,754	2,903	3,346	3,441	3,656	3,638	3,478	3,293
Nevada	650	880	1,520	1,215	878	843	897	945	540
Placer	1,650	3,000	5,400	5,050	4,654	4,815	4,967	5,171	4,426
Total	3,323	5,634	9,823	9,611	8,973	9,314	9,502	9,594	8,259
<u>Marysville Dist.</u>									
Butte	360	480	350	285	94	104	38	43	31
Sutter	340	525	746	300	180	171	171	194	200
Yuba	550	700	921	850	820	804	755	771	770
Total	1,250	1,705	2,017	1,435	1,094	1,079	964	1,008	1,001
<u>Other counties</u>									
Glenn	100	420	305	257	97	97	95	69	90
Kern	1,410	1,130	1,033	490	126	80	93	88	121
Los Angeles	1,800	4,300	4,370	2,200	721	681	546	412	288
San Diego	230	270	250	175	137	157	158	175	141
San Joaquin	550	1,160	790	565	263	134	85	72	188
San Luis Obispo	1,350	1,775	880	570	436	410	215	116	116
Balance ^a	2,377	3,266	2,352	1,161	589	471	314	192	190
Total	7,817	12,321	9,980	5,418	2,369	2,030	1,506	1,124	1,134
	percent of total								
<u>District</u>									
North Bay	11.6	15.0	23.0	29.4	31.4	29.2	25.8	25.0	26.5
Santa Clara	9.6	12.0	11.6	12.6	13.8	14.4	15.0	15.9	16.3
Central	32.1	28.8	27.6	24.6	23.3	24.1	24.5	24.9	25.2
Mountain	12.5	12.7	17.0	19.5	22.7	24.2	27.5	28.0	25.4
Marysville	4.7	3.8	3.5	2.5	2.8	2.8	2.8	2.9	3.1
Other counties	29.5	27.7	17.3	11.0	6.0	5.3	4.4	3.3	3.5

^a All counties (31) not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, 1919-1953," (Spec. Pub. 257, Supp.), April 1959; and "Acreage Estimates, California Fruit and Nut Crops," as of 1955 and 1960.

TABLE 18

California Pears, Other Than Bartlett: Bearing Acreage by County, 1920-60

County and district	1920	1925	1930	1935	1940	1945	1950	1955	1960
1	2	3	4	5	6	7	8	9	10
All counties	3,010	4,420	7,935	8,281	7,261	6,470	5,241	4,568	3,771
<u>North Bay Dist.</u>									
Lake	0	0	20	40	10	10	5	5	7
Marin	0	0	0	0	0	0	0	0	0
Mendocino	25	100	300	180	128	89	22	24	24
Napa	0	0	0	15	16	7	8	9	3
Sonoma	0	0	20	70	75	35	9	0	6
Total	25	100	340	305	229	141	44	38	40
<u>Santa Clara Dist.</u>									
Alameda	50	50	55	40	42	18	5	6	9
Monterey	110	320	1,115	850	500	204	136	116	28
San Benito	150	265	609	752	655	575	478	471	457
San Mateo	0	20	85	100	57	57	13	13	0
Santa Clara	725	950	2,049	2,350	2,402	2,495	2,258	2,142	1,761
Santa Cruz	250	440	600	815	728	379	287	299	183
Total	1,285	2,045	4,513	4,907	4,384	3,728	3,177	3,047	2,438
<u>Central Dist.</u>									
Contra Costa	50	50	175	140	141	220	208	128	136
Sacramento	200	250	250	225	196	211	176	186	186
Solano	200	250	370	470	471	353	243	109	47
Yolo	0	0	12	12	12	5	5	0	0
Total	450	550	807	847	820	769	632	423	369
<u>Mountain Dist.</u>									
El Dorado	175	250	350	550	544	551	472	399	340
Nevada	120	170	180	135	103	87	56	56	45
Placer	750	900	1,000	750	649	663	577	391	294
Total	1,045	1,320	1,530	1,435	1,296	1,301	1,105	846	679
<u>Marysville Dist.</u>									
Butte	70	100	75	25	5	40	5	4	0
Sutter	0	0	28	30	24	19	13	14	54
Yuba	0	0	35	82	77	73	73	79	52
Total	70	100	138	137	106	132	91	97	106
<u>Other counties</u>									
Glenn	20	80	120	110	108	108	107	60	83
Kern	40	50	47	10	3	0	0	0	5
Los Angeles	0	0	0	125	114	109	11	9	1
San Diego	20	30	30	25	24	27	20	13	9
San Joaquin	0	40	40	40	22	23	5	2	0
San Luis Obispo	0	0	80	30	12	12	2	1	1
Balance	55	105	290	310	143	100	47	32	40
Total	135	305	607	650	426	379	192	117	139
percent of total									
District									
North Bay	0.8	2.3	4.3	3.7	3.2	2.2	0.8	0.8	1.1
Santa Clara	42.7	46.3	56.9	59.3	60.4	57.6	60.6	66.7	64.6
Central	15.0	12.4	10.2	10.2	11.3	12.2	12.1	9.3	9.8
Mountain	34.7	29.8	19.3	17.3	17.8	20.1	21.1	18.5	18.0
Marysville	2.3	2.3	1.7	1.7	1.4	2.0	1.7	2.1	2.8
Other counties	4.5	6.9	7.6	7.8	5.9	5.9	3.7	2.6	3.7

a/ All counties (31) not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, 1919-1953," (Spec. Pub. 257, Supp.), April 1959; and "Acreage Estimates, California Fruit and Nut Crops," as of 1955 and 1960.

TABLE 19
California Pears: 1940 Acreage by Age, Variety, and County

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett Pears							
North Bay	5,045	3,543	2,949	1,008	12,545	383	12,928
Santa Clara	2,941	996	1,038	508	5,483	281	5,764
Central	6,648	1,242	1,032	754	9,676	334	10,010
Mountain	4,533	2,395	1,296	515	8,739	491	9,230
Marysville	298	439	220	4	961	17	978
Other counties	1,438	612	231	103	2,384	57	2,441
Total	20,903	9,227	6,766	2,892	39,788	1,563	41,351
Hardy Pears							
North Bay	0	24	0	0	24	0	24
Santa Clara	308	730	820	310	2,168	136	2,304
Central	24	42	74	9	149	62	211
Mountain	31	53	12	15	111	20	131
Marysville	14	11	21	0	46	24	70
Other counties	8	0	0	0	8	7	15
Total	385	860	927	334	2,506	249	2,755
Other Pears							
North Bay	34	70	84	12	200	7	207
Santa Clara	825	661	598	320	2,404	200	2,604
Central	255	172	101	92	620	16	636
Mountain	422	300	262	89	1,073	87	1,160
Marysville	4	6	10	7	27	56	83
Other counties	254	72	31	18	375	37	412
Total	1,794	1,281	1,086	538	4,699	403	5,102
Anjou	184	62	86	82	414	31	445
Bosc	272	299	321	88	980	48	1,028
Comice	322	193	111	102	733	143	876
Winter Nelis	543	350	286	82	1,261	16	1,277
Minor varieties	473	372	282	184	1,311	165	1,476
All Pears							
North Bay	5,079	3,637	3,033	1,020	12,769	390	13,159
Santa Clara	4,074	2,387	2,456	1,138	10,055	617	10,672
Central	6,927	1,456	1,207	855	10,445	412	10,857
Mountain	4,986	2,748	1,570	619	9,923	598	10,521
Marysville	316	456	251	11	1,034	97	1,131
Other counties	1,700	684	262	121	2,767	101	2,868
Total	23,082	11,368	8,779	3,764	46,993	2,215	49,208
percent of total acreage							
Bartlett	50.5	22.3	16.4	7.0	96.2	3.8	
Hardy	14.0	31.2	33.7	12.1	91.0	9.0	
Anjou	41.4	13.9	19.3	18.4	93.0	7.0	
Bosc	26.5	29.1	31.2	8.5	95.3	4.7	
Comice	36.8	22.6	12.7	11.6	83.7	16.3	
Winter Nelis	42.5	27.4	22.4	6.4	98.7	1.3	
Minor varieties	32.0	25.2	19.1	12.5	88.8	11.2	
All varieties	46.9	23.2	17.8	7.6	95.5	4.5	

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Table 19 continued.

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett Pears--county detail							
North Bay District							
Lake	1,720	938	693	358	3,709	304	4,013
Mendocino	865	1,165	1,240	357	3,627	28	3,655
Sonoma	1,620	650	761	219	3,250	40	3,290
Napa-Marin	840	790	255	74	1,959	11	1,970
Total	5,045	3,543	2,949	1,008	12,545	383	12,928
Santa Clara District							
Santa Clara	2,180	693	816	423	4,112	262	4,374
Santa Cruz	307	94	85	52	538	10	548
San Benito	143	105	16	16	280	6	286
Other counties ^{a/}	311	104	121	17	553	3	556
Total	2,941	996	1,038	508	5,483	281	5,764
Central District							
Sacramento	2,164	506	477	555	3,702	150	3,852
Solano	2,153	434	236	162	2,985	132	3,117
Contra Costa	2,004	281	226	37	2,548	52	2,600
Yolo	327	21	93	0	441	0	441
Total	6,648	1,242	1,032	754	9,676	334	10,010
Mountain District							
Placer	2,292	1,301	562	175	4,330	251	4,581
El Dorado	1,585	917	701	289	3,492	214	3,706
Nevada	656	177	33	51	917	26	943
Total	4,533	2,395	1,296	515	8,739	491	9,230
Marysville District							
Yuba	218	282	211	4	715	15	730
Sutter	20	130	1	0	151	2	153
Butte	60	27	8	0	95	0	95
Total	298	439	220	4	961	17	978
Other counties							
Glenn	96	0	1	0	97	0	97
San Joaquin	48	162	51	2	263	21	284
Kern	125	0	0	0	125	7	132
San Luis Obispo	301	116	13	6	436	0	436
Los Angeles	573	95	53	21	742	0	742
San Diego	35	45	27	30	137	12	149
Balance ^{b/}	260	194	86	44	584	17	601
Total	1,438	612	231	103	2,384	57	2,441
State Total	20,903	9,227	6,766	2,892	39,788	1,563	41,351

^{a/} Alameda, Monterey, and San Mateo.^{b/} All counties not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, as of 1940," issued June, 1941, supplemented by unpublished data (for varietal breakdown by major counties) furnished by this office, October 1961. These data do not include revisions made after 1941.

TABLE 20

California Pears: 1950 Acreage by Age, Variety, and County

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett Pears							
North Bay	7,452	882	247	139	8,720	542	9,262
Santa Clara	3,980	461	353	285	5,079	548	5,627
Central	7,446	391	362	270	8,469	667	9,136
Mountain	8,004	900	362	229	9,495	928	10,423
Marysville	913	10	11	16	950	16	966
Other counties	1,320	84	22	40	1,466	63	1,529
Total	29,115	2,728	1,357	979	34,179	2,764	36,943
Hardy Pears							
North Bay	0	2	0	0	2	0	2
Santa Clara	1,158	170	122	46	1,496	193	1,689
Central	193	19	21	30	263	10	273
Mountain	105	10	16	0	131	17	148
Marysville	55	0	19	0	74	22	96
Other counties	12	0	0	0	12	0	12
Total	1,523	201	178	76	1,978	242	2,220
Other Pears							
North Bay	29	0	3	0	32	25	57
Santa Clara	1,378	151	82	43	1,654	25	1,679
Central	306	38	22	3	369	25	394
Mountain	787	85	38	7	917	10	927
Marysville	13	0	3	0	16	0	16
Other counties	172	1	1	2	176	4	180
Total	2,685	275	149	55	3,164	89	3,253
Anjou	163	38	10	12	223	24	247
Bosc	518	73	19	9	619	2	621
Comice	662	36	41	15	754	40	794
Winter Nelis	829	52	21	10	912	2	914
Minor varieties	513	76	58	9	656	21	677
All Pears							
North Bay	7,481	884	250	139	8,754	567	9,321
Santa Clara	6,516	782	557	374	8,229	766	8,995
Central	7,945	448	405	303	9,101	702	9,803
Mountain	8,896	995	416	236	10,543	955	11,498
Marysville	981	10	33	16	1,040	38	1,078
Other counties	1,504	85	23	42	1,654	67	1,721
Total	33,323	3,204	1,684	1,110	39,321	3,095	42,416
percent of total acreage							
Bartlett	78.8	7.4	3.7	2.6	92.5	7.5	
Hardy	68.6	9.1	8.0	3.4	89.1	10.9	
Anjou	66.0	15.4	4.0	4.9	90.3	9.7	
Bosc	83.4	11.8	3.1	1.4	99.7	.3	
Comice	83.4	4.5	5.2	1.9	95.0	5.0	
Winter Nelis	90.7	5.7	2.3	1.1	99.8	.2	
Minor varieties	75.8	11.2	8.6	1.3	96.9	3.1	
All varieties	78.5	7.6	4.0	2.6	92.7	7.3	

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Table 20 continued.

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett Pears--county detail							
<u>North Bay District</u>							
Lake	2,914	421	166	93	3,594	406	4,000
Mendocino	1,831	204	11	8	2,054	64	2,118
Sonoma	1,772	206	53	32	2,063	60	2,123
Napa-Marin	935	51	17	6	1,009	12	1,021
Total	7,452	882	247	139	8,720	542	9,262
<u>Santa Clara Dist.</u>							
Santa Clara	3,261	429	295	247	4,232	500	4,732
Santa Cruz	499	30	56	32	617	25	642
San Benito	132	0	0	5	137	17	154
Other counties ^{a/}	88	2	2	1	93	6	99
Total	3,980	461	353	285	5,079	548	5,627
<u>Central District</u>							
Sacramento	3,185	228	150	242	3,805	467	4,272
Solano	2,103	93	163	9	2,368	140	2,508
Contra Costa	1,780	70	48	19	1,917	38	1,955
Yolo	378	0	1	0	379	22	401
Total	7,446	391	362	270	8,469	667	9,136
<u>Mountain District</u>							
Placer	4,036	550	247	127	4,960	807	5,767
El Dorado	3,191	305	94	48	3,638	69	3,707
Nevada	777	45	21	54	897	52	949
Total	8,004	900	362	229	9,495	928	10,423
<u>Marysville Dist.</u>							
Yuba	713	3	9	15	740	12	752
Sutter	172	0	0	0	172	4	176
Butte	28	7	2	1	38	0	38
Total	913	10	11	16	950	16	966
<u>Other counties</u>							
Glenn	95	0	0	0	95	0	95
San Joaquin	75	10	0	0	85	1	86
Kern	90	0	0	0	90	0	90
San Luis Obispo	198	15	2	0	215	0	215
Los Angeles	518	15	4	9	546	18	564
San Diego	111	17	14	15	157	22	179
Balance ^{b/}	233	27	2	16	278	22	300
Total	1,320	84	22	40	1,466	63	1,529
State Total	29,115	2,728	1,357	979	34,179	2,764	36,943

a/ Alameda, Monterey, and San Mateo.

b/ All counties not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, as of 1950," issued June 1951, supplemented by unpublished data (for varietal breakdown by major counties) furnished by this office, October 1961. These data do not include revisions made after 1951.

TABLE 21

California Pears: 1960 Acreage by Age, Variety, and County

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett Pears							
North Bay	7,331	180	463	646	8,620	3,702	12,322
Santa Clara	3,930	196	481	688	5,295	879	6,174
Central	6,897	231	667	385	8,180	1,780	9,960
Mountain	6,015	248	741	1,255	8,259	1,373	9,632
Marysville	872	16	40	73	1,001	998	1,999
Other counties	867	12	42	213	1,134	1,184	2,318
Total	25,912	883	2,434	3,260	32,489	9,916	42,405
Hardy Pears							
North Bay	2	9	0	0	11	9	20
Santa Clara	1,116	34	219	103	1,472	105	1,577
Central	148	31	1	2	182	0	182
Mountain	80	6	9	2	97	4	101
Marysville	65	0	0	16	81	0	81
Other counties	6	0	0	0	6	0	6
Total	1,417	80	229	123	1,849	118	1,967
Other Pears							
North Bay	17	6	0	6	29	12	41
Santa Clara	910	31	18	7	966	16	982
Central	146	6	32	3	187	4	191
Mountain	554	15	3	10	582	7	589
Marysville	25	0	0	0	25	70	95
Other counties	113	1	1	18	133	173	306
Total	1,765	59	54	44	1,922	282	2,204
Anjou	143	1	1	0	145	5	150
Bosc	397	4	0	3	404	11	415
Comice	475	22	40	8	545	21	566
Winter Nelis	553	10	1	1	565	65	630
Minor varieties	197	22	12	32	263	180	443
All Pears							
North Bay	7,350	195	463	652	8,660	3,723	12,383
Santa Clara	5,956	261	718	798	7,733	1,000	8,733
Central	7,191	268	700	390	8,549	1,784	10,333
Mountain	6,649	269	753	1,267	8,938	1,384	10,322
Marysville	962	16	40	89	1,107	1,068	2,175
Other counties	986	13	43	231	1,273	1,357	2,630
Total	29,094	1,022	2,717	3,427	36,260	10,316	46,576
	percent of total acreage						
Bartlett	61.1	2.1	5.7	7.7	76.6	23.4	
Hardy	72.0	4.1	11.6	6.3	94.0	6.0	
Anjou	95.3	.7	.7	0	96.7	3.3	
Bosc	95.7	1.0	0	.7	97.4	2.6	
Comice	83.9	3.9	7.1	1.4	96.3	3.7	
Winter Nelis	87.7	1.6	.2	.2	89.7	10.3	
Minor varieties	44.5	5.0	2.7	7.2	59.4	40.6	
All varieties	62.5	2.2	5.8	7.4	77.9	22.1	

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Table 21 continued.

Variety and district	Bearing: Years since planting				Bearing	Non-bearing	Total
	Over 20	16-20	11-15	Under 11			
1	2	3	4	5	6	7	8
Bartlett pears---county detail							
<u>North Bay Dist.</u>							
Lake	3,490	134	283	360	4,267	1,385	5,652
Mendocino	1,840	24	107	82	2,053	1,662	3,715
Sonoma	1,425	20	59	117	1,621	569	2,190
Napa-Marin	576	2	14	87	679	86	765
Total	7,331	180	463	646	8,620	3,702	12,322
<u>Santa Clara Dist.</u>							
Santa Clara	3,201	149	426	621	4,397	729	5,126
Santa Cruz	474	28	20	36	558	56	614
San Benito	206	17	23	29	275	91	366
Other counties ^{a/}	49	2	12	2	65	3	68
Total	3,930	196	481	688	5,295	879	6,174
<u>Central Dist.</u>							
Sacramento	3,394	188	521	238	4,341	1,117	5,458
Solano	1,994	41	95	120	2,250	557	2,807
Contra Costa	1,181	2	42	11	1,236	43	1,279
Yolo	328	0	9	16	353	63	416
Total	6,897	231	667	385	8,180	1,780	9,960
<u>Mountain Dist.</u>							
Placer	2,530	147	637	1,112	4,426	963	5,389
El Dorado	3,052	57	62	122	3,293	403	3,696
Nevada	433	44	42	21	540	7	547
Total	6,015	248	741	1,255	8,259	1,373	9,632
<u>Marysville Dist.</u>							
Yuba	708	15	22	25	770	479	1,249
Sutter	134	0	18	48	200	241	441
Butte	30	1	0	0	31	278	309
Total	872	16	40	73	1,001	998	1,999
<u>Other counties</u>							
Glenn	74	0	0	16	90	128	218
San Joaquin	62	0	1	125	188	570	758
Kern	83	0	0	38	121	163	284
San Luis Obispo	116	0	0	0	116	0	116
Los Angeles	272	4	0	12	288	6	294
San Diego	104	8	22	7	141	6	147
Balance ^{b/}	156	0	19	15	190	311	501
Total	867	12	42	213	1,134	1,184	2,318
State Total	25,912	883	2,434	3,260	32,489	9,916	42,405

^{a/} Alameda, Monterey, and San Mateo.

^{b/} All counties not enumerated separately.

Source: California Crop and Livestock Reporting Service, "Acreage Estimates, California Fruit and Nut Crops, as of 1960," issued June 1961, supplemented by unpublished data (for varietal breakdown by major counties) furnished by this office, October 1961.

TABLE 22

California Pears: Interstate Rail Passings,^{a/} by District and Variety, Five-Year Averages, 1945-59

District ^{b/}	1945- 1949	1950- 1954	1955- 1959	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6	7
	cars shipped			percent of state total		
<u>Bartlett pears</u>						
North Bay	789	712	934	19.6	18.9	27.9
Central	1,244	995	736	30.8	26.5	22.0
Mountain	1,484	1,472	1,232	36.8	39.1	36.8
Marysville	392	491	322	9.7	13.1	9.6
Santa Clara	46	8	19	1.1	.2	.5
Other counties	80	82	107	2.0	2.2	3.2
State total	4,035	3,760	3,350	100.0	100.0	100.0
<u>Other varieties</u>						
Santa Clara	449	277	191	67.0	58.9	45.7
Mountain	124	158	186	18.5	33.5	44.3
All others	96	36	42	14.5	7.6	10.0
State total	669	471	419	100.0	100.0	100.0
<u>All pears</u>						
North Bay	793	715	940	16.9	16.9	25.0
Central	1,298	1,012	751	27.6	23.9	19.9
Mountain	1,608	1,630	1,418	34.2	38.5	37.6
Marysville	416	496	325	8.8	11.7	8.6
Santa Clara	495	285	210	10.5	6.8	5.6
Other counties	94	93	125	2.0	2.2	3.3
State total	4,704	4,231	3,769	100.0	100.0	100.0
	percent Bartlett ^{c/}					
<u>All pears</u>						
North Bay	99.5	99.6	99.4			
Central	95.9	98.4	98.0			
Mountain	92.3	90.3	86.9			
Marysville	94.0	98.9	99.2			
Santa Clara	9.4	3.0	5.8			
Other counties	84.9	88.3	86.0			
State total	85.8	88.9	88.9			

a/ Excludes cars to processors and "mostly pears" in mixed cars, but includes government purchases, if any.

b/ Counties included in the different districts are listed in table 16.

c/ Passings of Bartlett pears expressed as percent of passings of all pears.

Source: California Crop and Livestock Reporting Service, "Interstate Shipments of California Deciduous Tree Fruits," annual reports for 1945-59.

TABLE 23
California Bartlett Pears: Interstate Rail Passings,^{a/}
by District, by Ten-Day Periods, 1950-59

Period	District ^{b/}				Other counties	State total
	Central	Marysville	Mountain	North Bay		
1	2	3	4	5	6	7
cars shipped						
<u>1950-54 average</u>						
July 1-10	32	28	6	0	0	66
11-20	290	92	30	0	3	415
21-31	306	95	124	1	2	528
Aug. 1-10	157	70	231	42	6	506
11-20	112	60	319	152	16	659
21-31	53	47	292	167	17	576
Sept. 1-10	22	50	218	143	14	447
11-20	16	28	153	107	15	319
21-30	2	13	68	63	11	157
Oct. 1-10	2	7	19	29	4	61
11-20	2	1	8	8	2	21
21-31	1	0	4	0	0	5
Season	995	491	1,472	712	90	3,760
<u>1955-59 average</u>						
July 1-10	37	23	2	0	0	62
11-20	228	92	13	0	1	334
21-31	230	93	126	1	3	453
Aug. 1-10	97	73	227	48	7	452
11-20	58	28	206	154	22	468
21-31	37	5	215	225	27	509
Sept. 1-10	19	2	136	183	18	358
11-20	18	3	98	136	13	268
21-30	9	2	85	99	20	215
Oct. 1-10	2	1	60	68	13	144
11-20	1	0	40	19	1	61
21-31	0	0	24	1	1	26
Season	736	322	1,232	934	126	3,350
percent of season total--1955-59						
July 1-10	5.1	7.2	.1	0	0	1.8
11-20	31.0	28.6	1.1	0	.2	10.0
21-31	31.3	28.9	10.2	.1	2.7	13.5
Aug. 1-10	13.2	22.5	18.4	5.1	5.7	13.5
11-20	7.8	8.8	16.7	16.5	17.9	14.0
21-31	5.0	1.5	17.5	24.1	21.2	15.2
Sept. 1-10	2.5	.6	11.1	19.6	14.5	10.7
11-20	2.5	1.0	7.9	14.5	10.0	8.0
21-30	1.2	.6	6.9	10.6	16.0	6.4
Oct. 1-10	.3	.3	4.9	7.3	10.0	4.3
11-20	.1	0	3.2	2.1	1.0	1.8
21-31	0	0	2.0	.1	.8	.8

a/ Excludes cars to processors and "mostly pears" in mixed cars, but includes government purchases, if any. July includes a few cars shipped in June during some years. Data for 1950 are estimated from monthly shipments.

b/ Counties included in the different districts are listed in table 16.

Source: California Crop and Livestock Reporting Service, "Interstate Shipments of California Deciduous Tree Fruits," annual reports for 1950-59.

TABLE 24

California Pears Other Than Bartlett: Interstate Rail Passings,^{a/}
by District, Monthly, 1945-59

Year and month	District ^{b/}		Other counties	State total	District		State total
	Santa Clara	Mountain			Santa Clara	Mountain	
1	2	3	4	5	6	7	8
	cars shipped				percent of season		
<u>1945-49 average</u>							
July	3	11	14	28	.8	8.9	4.3
August	48	16	2	66	10.6	13.2	9.8
September	103	44	16	163	23.0	35.5	24.3
October	91	42	28	161	20.2	33.7	24.0
November	118	8	19	145	26.2	6.5	21.6
December	52	2	3	57	11.6	1.8	8.6
Later	34	1	14	49	7.6	.4	7.4
Season	449	124	96	669	100.0	100.0	100.0
<u>1950-54 average</u>							
July	0	7	7	14	0	4.0	2.9
August	3	1	1	5	1.2	.5	1.0
September	41	63	10	114	15.0	40.1	24.3
October	75	59	3	137	26.9	37.6	29.1
November	70	23	0	93	25.1	14.6	19.8
December	41	5	0	46	14.8	3.2	9.8
Later	47	0	15	62	17.0	0	13.1
Season	277	158	36	471	100.0	100.0	100.0
<u>1955-59 average</u>							
July	0	5	5	10	0	2.9	2.4
August	5	1	1	7	2.4	.8	1.6
September	36	87	16	139	18.8	46.7	33.2
October	56	66	5	127	29.4	35.3	30.3
November	52	23	1	76	27.2	12.3	18.0
December	28	2	2	32	14.6	1.1	7.7
Later	14	2	12	28	7.6	.9	6.8
Season	191	186	42	419	100.0	100.0	100.0
	percent of state total						
1945-49	67.0	18.5	14.5	100.0			
1950-54	58.9	33.5	7.6	100.0			
1955-59	45.7	44.3	10.0	100.0			

a/ Excludes cars to processors and "mostly pears" in mixed cars, but includes government purchases, if any. July includes a few cars shipped in June during some years.

b/ Counties included in the different districts are listed in table 16.

Source: California Crop and Livestock Reporting Service, "Interstate Shipments of California Deciduous Tree Fruits," annual reports for 1945-59.

TABLE 25

California Bartlett Pears: Out-of-State Shipments,
by District, 1941-59

District ^{a/}	1941- 1944	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5
	1,000 packages			
Sacramento River	334.0	560.3	529.6	441.8
Solano	110.8	177.0	112.7	51.8
Contra Costa	107.2	141.9	71.4	60.9
Central District	552.0	879.2	713.7	554.5
El Dorado	335.2	533.2	549.1	526.2
Placer	287.5	461.2	428.2	421.1
Colfax	102.4	224.8	188.1	121.0
Mountain District	725.1	1,219.2	1,165.4	1,068.3
Lake	276.9	345.6	536.9	639.7
Mendocino	169.4	341.8	200.4	208.5
Napa-Sonoma	1.0	1.8	1.2	0
North Bay District	447.3	689.2	738.5	848.2
Marysville District	158.8	218.8	284.8	283.6
Santa Clara District	1.2	23.5	4.0	0
Tehachapi District	19.1	26.9	31.4	44.8
State total	1,903.5	3,056.8	2,937.8	2,799.4
	percent of state total			
Central	29.00	28.76	24.30	19.81
Mountain	38.09	39.88	39.67	38.16
North Bay	23.50	22.55	25.14	30.30
Marysville	8.34	7.16	9.69	10.13
Other	1.07	1.65	1.20	1.60

^{a/} The individual shipping areas (shown as components of districts) are those established under the federal marketing order for California deciduous tree fruits.

Source: California Tree Fruit Agreement, annual reports for 1945-60.

TABLE 26

California Bartlett Pears: Grade and Size Composition
of Out-of-State Shipments, by years, 1945-60^{a/}

Grade or size	1952	1953	1954	1955	1956	1957	1958	1959	1960
1	2	3	4	5	6	7	8	9	10
<u>Grade^{b/}</u>									
U. S. No. 1	46.3	22.7	58.0	33.9	58.2	61.7	78.2	92.4	80.8
89-86%	27.1	25.4	19.9	24.6	17.3	24.6	11.9	4.6	9.2
85-80%	23.4	36.2	21.5	32.9	23.7	13.7	9.8	3.0	10.0
79-75%	2.9	8.7	.6	5.3	.8	0	.1	0	0
74% & below	.3	7.0	0	3.3	0	0	0	0	0
<u>Size^{c/}</u>									
80	.7	.8	.9	.6	.4	.5	1.9	1.1	.4
90	2.0	2.2	2.6	1.8	1.9	2.3	5.0	2.6	1.8
100	5.3	5.5	6.7	4.1	4.5	5.7	9.6	6.2	4.5
110	7.4	7.5	8.2	6.2	6.6	7.8	13.0	7.3	6.1
120	16.3	16.0	16.4	14.0	15.7	17.4	20.3	15.9	14.6
135	24.7	25.5	25.2	22.3	25.0	25.5	20.8	23.9	24.3
150	23.7	23.6	21.8	25.0	23.6	23.0	14.6	22.9	25.9
165	14.6	12.9	12.2	17.7	14.2	9.9	7.2	13.2	15.6
180	4.4	5.0	4.6	5.3	4.7	0	2.1	0	0
Unsize	.9	1.0	1.4	3.0	3.4	7.9	5.5	6.9	6.8
	1945	1946	1947	1948	1949	1950	1951		
<u>Size^{c/}</u>									
80	.7	1.4	1.1	.3	.9	.4	.7		
90	1.6	3.1	2.5	1.2	2.3	1.2	1.7		
100	3.9	6.4	5.9	3.2	5.5	3.4	4.0		
110	4.7	7.9	7.4	5.0	7.2	5.2	5.7		
120	11.3	15.0	14.9	12.0	16.0	12.4	12.2		
135	20.1	22.6	22.6	20.8	24.4	23.4	21.0		
150	24.3	21.9	23.2	24.7	23.5	26.4	24.1		
165	18.5	13.8	15.4	18.8	14.4	18.7	19.3		
180	9.9	5.6	5.6	10.2	4.6	7.3	10.9		
195	3.9	1.9	1.1	3.7	0	.1	0		
Unsize	1.1	.4	.3	.1	1.2	1.5	.4		

a/ Figures in the table are percentages of shipments represented by different grades and sizes. Amounts of less than 0.05 percent are shown as "0."

b/ The percentages, e.g., 89-86 percent, indicate the number of pears grading at least U. S. No. 1 in the U. S. combination grade. Data not available for years prior to 1952.

c/ Size 80 includes larger sizes. Sizes smaller than those listed (if shipped) are included with size 195 for 1945-51 and size 180 for 1952-60. Data not available for years prior to 1945.

Source: California Tree Fruit Agreement, annual reports for 1945-60.

TABLE 27

California Bartlett Pears: Size Composition of Out-of-State Shipments,^{a/}
by District,^{b/} 1945-49, 1950-54, and 1955-59 averages

Size ^{c/}	1945- 1949	1950- 1954	1955- 1959	1945- 1949	1950- 1954	1955- 1959	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6	7	8	9	10
	All districts			Lake District			Sacto. River District		
90	3.0	2.6	3.6	2.4	2.2	3.5	1.2	.5	2.9
100	5.0	5.0	6.0	5.7	4.2	5.7	2.7	1.7	4.1
110	6.4	6.8	8.2	7.0	5.4	6.8	4.0	2.8	5.7
120	13.9	14.7	16.7	14.9	14.9	18.4	11.4	9.0	12.8
135	22.1	24.0	23.5	22.0	26.8	25.5	23.1	21.2	21.6
150	23.5	23.9	21.8	22.0	25.7	21.1	29.1	30.3	27.3
165	16.2	15.5	12.5	15.5	13.3	8.7	20.9	25.0	19.1
180	9.3	6.5	2.4	9.7	6.0	1.9	7.3	8.6	3.2
Unsize	.6	1.0	5.3	.8	1.5	8.4	.3	.9	3.3
	El Dorado District			Mendocino District			Solano District		
90	3.5	3.0	5.0	4.9	5.1	6.5	.6	.9	3.5
100	5.5	5.0	6.6	8.1	9.6	11.7	2.2	2.1	4.1
110	8.2	7.1	8.9	10.1	12.6	14.3	3.0	2.9	6.2
120	16.6	16.4	18.5	15.9	19.6	21.1	10.8	10.2	12.8
135	23.1	25.1	24.7	21.3	23.4	20.9	22.4	18.8	23.1
150	20.7	21.4	18.5	19.5	16.3	14.4	30.0	30.3	30.0
165	13.7	14.2	9.5	12.0	8.6	5.4	20.5	23.0	15.8
180	8.6	7.0	2.2	7.8	4.1	.7	9.2	11.2	2.7
Unsize	.1	.8	6.1	.4	.7	5.0	1.3	.6	1.8
	Placer District			Marysville District			Contra Costa District		
90	3.8	3.1	4.3	4.0	3.1	3.6	1.3	1.3	3.6
100	5.5	5.8	7.4	5.9	7.2	6.4	2.9	3.2	6.3
110	7.2	8.9	10.1	7.0	10.2	9.2	4.5	4.0	7.8
120	13.7	17.0	17.8	14.5	15.0	14.9	12.5	12.9	16.3
135	21.4	24.2	23.7	23.9	23.7	21.8	20.8	24.0	22.5
150	22.1	22.0	19.8	24.3	20.7	21.8	23.5	28.2	23.0
165	15.0	12.3	9.8	14.9	13.9	15.5	17.8	18.0	17.0
180	10.7	5.0	1.1	4.8	5.1	2.8	16.6	8.3	3.4
Unsize	.6	1.7	6.0	.7	1.1	4.0	.1	.1	.1
	Colfax District						Tehachapi District		
90	5.6	7.1	6.8				1.5	1.3	1.3
100	6.7	8.3	9.0				3.1	4.7	3.2
110	5.8	8.3	11.5				2.7	6.4	7.2
120	13.5	15.7	18.0				11.1	18.6	18.1
135	18.9	20.7	22.4				23.2	25.6	28.8
150	19.4	18.9	18.3				26.6	19.3	25.3
165	14.5	12.9	10.2				17.7	14.2	13.0
180	14.1	7.4	1.9				13.9	8.9	2.9
Unsize	1.5	.7	1.9				.2	1.0	.2

a/ The figures in the table are percentages of shipments represented by different sizes. Amounts of less than 0.05 percent are shown as "0."

b/ The districts are those established under the federal marketing order for California deciduous tree fruits.

c/ Size 90 includes larger sizes and size 180 includes smaller sizes.

Source: California Tree Fruit Agreement, annual reports for 1945-59.

TABLE 28

California Bartlett Pears: ^{a/} Grade Composition of Out-of-State Shipments, ^{b/} by District, 1952-55 and 1956-59 Averages

Grade ^{c/}	1952- 1955	1956- 1959	Change	1952- 1955	1956- 1959	Change	1952- 1955	1956- 1959	Change
1	2	3	4	5	6	7	8	9	10
	All districts			Lake District			Sacto. River Dist.		
U. S. No. 1	40.2	72.6	32.4	47.0	96.4	49.4	53.5	59.4	5.9
89-86%	24.2	14.6	- 9.6	39.5	2.8	-36.7	27.4	10.3	-17.1
85-80%	28.5	12.6	-15.9	12.3	.8	-11.5	16.5	28.3	11.8
79% & below	7.1	0.2	- 6.9	1.2	0	- 1.2	2.6	2.0	- .6
	El Dorado District			Mendocino District			Solano District		
U. S. No. 1	32.8	54.9	22.1	44.2	96.9	52.7	13.3	29.1	15.8
89-86%	10.1	18.5	8.4	28.4	2.3	-26.1	44.2	39.7	- 4.5
85-80%	38.7	26.6	-12.1	24.6	.8	-23.8	41.0	30.8	-10.2
79% & below	18.4	0	-18.4	2.8	0	- 2.8	1.5	.4	- 1.1
	Placer District			Marysville District			Contra Costa District		
U. S. No. 1	6.8	29.9	23.1	58.2	93.9	35.7	17.3	6.2	-11.1
89-86%	23.8	50.5	26.7	10.2	2.9	- 7.3	4.5	10.4	5.9
85-80%	62.9	19.6	-43.3	28.0	3.2	-24.8	48.3	83.0	34.7
79% & below	6.5	0	- 6.5	3.6	0	- 3.6	29.9	.4	-29.5
	Colfax District						Tehachapi District		
U. S. No. 1	18.0	89.9	71.9				0	49.0	49.0
89-86%	20.3	6.2	-14.1				43.4	49.9	6.5
85-80%	30.6	3.9	-26.7				39.7	1.1	-38.6
79% & below	31.1	0	-31.1				16.9	0	-16.9

^{a/} The figures in the table are percentages of shipments represented by different grades. Amounts of less than 0.05 percent are shown as "0."

^{b/} The districts are those established under the federal marketing order for California deciduous tree fruits.

^{c/} The percentages, e.g., 89-86 percent, indicate the number of pears grading at least U. S. No. 1 in the U. S. Combination grade.

Source: California Tree Fruit Agreement, annual reports for 1952-59.

TABLE 29

U. S. Pears: Monthly Rail Carlot Shipments,^{a/} by State of Origin, and Imports, 1950-59

Month 1	California 2	Oregon 3	Washington 4	Other states 5	Total U. S. 6	Percent Calif. 7	Imports ^{b/} 8
	cars shipped					percent	cars
<u>1950-54 aver.</u>							
July	1,175				1,175	100.0	20
August	2,361	210	330	128	3,029	77.9	1
September	1,065	1,159	1,234	163	3,621	29.4	34
October	244	1,045	1,229	32	2,550	9.6	35
November	126	550	312	0	988	12.8	6
December	113	604	220	0	937	12.1	1
Later	75	1,296	441	0	1,812	4.3	227
Season	5,159	4,864	3,766	323	14,112	36.6	324
For proc. ^{c/}	676	615	1,620	20	2,931	23.1	
Net fresh	4,483	4,249	2,146	303	11,181	40.1	
<u>1955-59 aver.</u>							
July	902				902	100.0	71
August	1,554	90	170	94	1,908	81.4	1
September	997	739	403	93	2,232	44.7	12
October	381	939	483	10	1,813	21.0	13
November	136	645	277	0	1,058	12.8	3
December	68	720	140	0	928	7.4	1
Later	42	1,470	486	0	1,998	2.1	334
Season	4,080	4,603	1,959	197	10,839	37.6	435
For proc. ^{c/}	75	137	360	0	572	13.1	
Net fresh	4,005	4,466	1,599	197	10,267	39.0	
	percent of season total						
<u>1955-59 aver.</u>							
July	22.1				8.3		16.4
August	38.1	2.0	8.7	47.8	17.6		.2
September	24.5	16.0	20.6	46.9	20.6		2.6
October	9.3	20.4	24.6	5.2	16.7		3.0
November	3.3	14.0	14.1	.1	9.8		.7
December	1.7	15.7	7.2	0	8.6		.2
Later	1.0	31.9	24.8	0	18.4		76.9
Season	100.0	100.0	100.0	100.0	100.0		100.0

^{a/} Includes boat shipments and government purchases reduced to carlot equivalents but excludes truck shipments. July includes a few cars shipped (from California) in June during some years and imports for June.

^{b/} Generally, 75-90 percent of the imports are from Argentina. The great bulk of these arrive during March-May.

^{c/} Shipments to processors included during 1950-56. Such shipments are not reported on a monthly basis but they occur during the peak of the season for each state.

Source: U. S. Department of Agriculture, Agricultural Marketing Service (and predecessor agencies), "Fresh Fruit and Vegetable Shipments, by Commodities, States and Months," annual reports for 1950-59.

TABLE 30

U. S. Pears: Monthly Carlot Shipments, Rail and Truck, by State of Origin,
1955-59 average

Item ^{a/}	July	August	Sept.	Oct.	Nov.	Dec.	Later	Season
1	2	3	4	5	6	7	8	9
carlot equivalents								
<u>California</u>								
Rail	902	1,554	997	381	136	68	42	4,080
Truck passings	135	285	138	89	36	14	72	769
Truck unloads	103	442	290	163	73	45	84	1,200
Total	1,140	2,281	1,425	633	245	127	198	6,049
<u>Washington</u>								
Rail		170	403	483	277	140	486	1,959
Truck		185	225	106	92	76	243	927
Total		355	628	589	369	216	729	2,886
<u>Oregon</u>								
Rail		90	739	939	645	720	1,470	4,603
Truck		0	10	48	76	77	186	397
Total		90	749	987	721	797	1,656	5,000
<u>Colorado</u>								
Rail		59	38	8				105
Truck		34	36	11				81
Total		93	74	19				186
<u>Michigan</u>								
Rail			1					1
Truck	1	38	58	18	1			116
Total	1	38	59	18	1			117
<u>United States</u>								
Rail	902	1,908	2,232	1,813	1,058	928	1,998	10,839
Truck	239	984	757	435	278	212	585	3,490
Total	1,141	2,892	2,989	2,248	1,336	1,140	2,583	14,329
percent moved by truck ^{b/}								
California	20.9	31.9	30.0	39.8	44.7	46.3	78.7	32.6
Washington		52.1	35.8	18.0	24.7	35.2	33.4	32.1
Oregon		0	13.1	4.9	10.5	9.7	11.2	7.9
Colorado		36.5	48.9	57.4				43.9
United States	20.9	34.0	25.3	24.0	20.8	18.6	22.7	24.4
U.S. less Oreg.	20.9	35.1	33.3	30.7	32.9	39.3	43.0	33.2

a/ Truck shipments are reported only for the five states listed and are not complete even for these. California truck shipments shown as "passings" represent inter-state movement and "unloads" are receipts of California production at Los Angeles, Oakland, and San Francisco markets. July includes a few cars shipped in June in some years.

b/ Since truck shipments are incomplete the percentages are minimal values.

Source: U. S. Department of Agriculture, Agricultural Marketing Service, "Fresh Fruit and Vegetable Shipments, by Commodities, States and Months," annual reports for 1955-59.

TABLE 31

California Bartlett Pears: Annual Auction Sales and Prices, by Market, 1935-60

Year and type of pack	Auction sales						Auction price	
	New York	Chicago	Phila-delphia	Other ^{a/} auctions	All auctions	% at New York	New York	All auctions
1	2	3	4	5	6	7	8	9
	1,000 packages					percent	\$ per package	
<u>In boxes</u>								
1935-39	808.6	277.5	207.1	587.7	1,880.9	43.0	2.54	2.31
1940-44	543.3	226.6	185.4	515.3	1,470.6	36.9	3.80	3.73
1945-49	506.3	224.6	176.8	436.2	1,343.9	37.7	4.48	4.42
1950-54	502.6	220.3	180.1	450.7	1,353.7	37.1	5.00	4.90
1955-59	430.5	176.5	152.4	307.1	1,066.5	40.4	5.30	5.24
1945	492.4	238.4	158.2	435.3	1,324.3	37.2	4.22	4.19
1946	567.9	235.7	195.0	488.8	1,487.4	38.2	4.53	4.43
1947	574.7	232.8	197.7	480.0	1,485.2	38.7	4.52	4.42
1948	244.6	131.9	88.6	174.8	639.9	38.2	5.63	5.58
1949	652.0	284.1	244.7	601.8	1,782.6	36.6	3.51	3.48
1950	527.4	222.7	194.5	452.3	1,396.9	37.8	5.00	4.92
1951	498.0	240.6	194.2	490.3	1,423.1	35.0	4.95	4.82
1952	599.6	253.7	214.7	557.4	1,625.4	36.9	4.42	4.31
1953	406.3	185.3	127.9	387.0	1,106.5	36.7	5.30	5.18
1954	481.9	199.0	169.1	366.8	1,216.8	39.6	5.34	5.25
1955	364.1	176.8	118.3	269.3	928.5	39.2	5.38	5.31
1956	420.6	206.1	155.6	384.7	1,167.0	36.0	5.20	5.18
1957	462.1	180.3	174.0	317.0	1,133.4	40.8	5.34	5.28
1958	458.9	166.4	160.8	309.2	1,095.3	41.9	5.23	5.21
1959	446.8	152.8	153.4	255.1	1,008.1	44.3	5.33	5.22
1960	347.0	130.3	122.7	160.0	760.0	45.7	6.24	6.14
1961								
1962								
<u>In other containers^{b/}</u>								
1935-39	.1	.5	0	1.0	1.6	8.3		
1940-44	2.6	12.2	.6	5.2	20.6	12.7		
1945-49	.9	3.4	.1	4.2	8.6	10.8		
1950-54	.4	.8	.3	5.8	7.3	5.9		
1955-59	.7	.8	0	1.5	3.0	23.3		

^{a/} The other auctions include Boston, Cincinnati, Cleveland, Detroit, Pittsburgh, and St. Louis plus Minneapolis and St. Paul until end of 1944 and Baltimore until end of 1956.

^{b/} Converted to equivalent standard boxes at 1 box equal (approximately) to 2 half boxes, 2 lugs, 1 San Francisco lug, and 2 other containers.

Source: California Federal-State Market News Service, "Pears: Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1935-60.

TABLE 32

California Pears, Other Than Bartlett: Annual Auction Sales and Prices,
by Market, 1935-60

Year and type of pack	Auction sales						Auction price	
	New York	Chicago	Phila- delphia	Other ^{a/} auctions	All auctions	% at New York	New York	All auctions
1	2	3	4	5	6	7	8	9
	1,000 packages					percent	\$ per package	
<u>In boxes</u>								
1935-39	122.5	9.9	13.2	29.1	174.7	70.1	1.93	1.94
1940-44	153.3	7.1	11.1	15.7	187.2	81.9	3.49	3.43
1945-49	232.0	7.8	15.2	13.5	268.5	86.4	3.84	3.85
1950-54	199.2	13.3	15.8	25.8	254.1	78.4	4.39	4.39
1955-59	151.5	12.9	15.5	24.9	204.8	74.0	4.87	4.81
1945	180.1	7.1	19.1	10.1	216.4	83.2	4.37	4.40
1946	211.3	18.9	13.1	21.0	264.3	79.6	4.35	4.30
1947	315.7	6.1	19.2	18.5	359.5	87.8	3.65	3.70
1948	160.5	4.5	7.9	15.5	178.4	90.0	3.46	3.53
1949	292.3	2.3	16.9	12.5	324.0	90.2	3.38	3.32
1950	141.5	3.4	10.0	6.5	161.4	87.7	4.22	4.30
1951	226.3	14.4	18.9	39.6	299.2	75.6	4.07	3.96
1952	144.6	21.4	14.8	22.0	202.8	71.3	4.76	4.72
1953	207.3	14.0	9.7	21.4	252.4	82.1	3.88	3.91
1954	276.2	13.3	25.4	39.7	354.6	77.9	5.01	5.04
1955	126.5	10.6	8.6	16.6	162.3	77.9	4.54	4.48
1956	168.7	23.5	19.5	38.9	250.6	67.3	4.94	4.85
1957	195.9	12.0	17.6	21.8	247.3	80.7	4.42	4.53
1958	114.0	10.5	18.5	32.6	175.6	64.9	4.94	4.71
1959	152.6	8.2	13.0	14.7	188.5	81.0	5.51	5.47
1960 ^{b/}	101.7	11.1	9.0	15.2	137.0	74.3	6.02	5.88
1961								
1962								
<u>In other containers^{c/}</u>								
1935-39	22.6	3.4	2.8	3.8	32.6	69.4		
1940-44	27.4	4.4	2.2	7.5	41.5	66.0		
1945-49	18.8	2.5	3.6	5.5	30.4	61.9		
1950-54	14.4	1.6	3.3	2.5	21.8	66.3		
1955-59	9.3	.7	5.5	1.4	16.9	55.7		

^{a/} The other auctions include Boston, Cincinnati, Cleveland, Detroit, Pittsburgh, and St. Louis plus Minneapolis and St. Paul until end of 1944 and Baltimore until end of 1956. Reports for Cleveland and Detroit covered only Bartlett Pears during July 10, 1943-June 30, 1944.

^{b/} Sales to December 31 only.

^{c/} Converted to equivalent standard boxes at 1 box equal (approximately) to 2 half boxes, 2 lugs, 1 San Francisco lug, and 2 other containers.

Source: California Federal-State Market News Service, "Pears-Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1935-60.

TABLE 33

California Pears: Annual Auction Sales, by Market and Variety, 1950-59

Year and variety	Standard box pack only						Other packs ^{b/}	
	New York	Chicago	Phila- delphia	Other ^{a/} auctions	All auctions	% at New York	Equiv. boxes	% of total
1	2	3	4	5	6	7	8	9
	1,000 boxes					percent	1,000	percent
<u>1950-54 aver.</u>								
All	701.8	233.6	195.9	476.5	1,607.8	43.6	29.1	1.8
Bartlett	502.6	220.3	180.1	450.7	1,353.7	37.1	7.3	.5
Other	199.2	13.3	15.8	25.8	254.1	78.4	21.8	7.9
Anjou	16.2	.2	.7	2.7	19.8	81.5	0	0
Bosc	50.1	9.1	14.0	20.5	93.7	53.5	c/	c/
Comice	76.6	c/	c/	.5	77.1	99.3	0	0
Early Bartlett	6.8	3.7	.7	1.2	12.4	55.1	.8	5.9
Forelle	8.1	0	0	0	8.1	100.0	1.0	11.3
Hardy	7.6	c/	0	.2	7.8	97.8	0	0
Seckel	.8	0	0	0	.8	100.0	4.7	85.0
Wilder	.2	0	0	.1	.3	62.1	14.3	97.6
Wint. Nelis	29.3	0	.1	.2	29.6	99.0	.2	.7
Minor	3.5	.3	.3	.4	4.5	79.2	.8	15.1
<u>1955-59 aver.</u>								
All	582.0	189.4	167.9	332.0	1,271.3	45.8	19.9	1.5
Bartlett	430.5	176.5	152.4	307.1	1,066.5	40.4	3.0	.3
Other	151.5	12.9	15.5	24.9	204.8	74.0	16.9	7.6
Anjou	8.3	.1	.1	.6	9.1	91.6	0	0
Bosc	63.0	9.4	14.1	22.4	108.9	57.9	0	0
Comice	47.3	0	0	.1	47.4	99.7	1.4	2.9
Early Bartlett	5.7	2.9	.8	1.4	10.8	52.7	.2	2.0
Forelle	7.9	0	0	0	7.9	100.0	1.2	11.7
Hardy	8.7	c/	0	0	8.7	99.6	0	0
Seckel	.5	0	.3	0	.8	64.7	8.2	88.1
Wilder	0	.1	0	c/	.1	0	5.8	97.2
Wint. Nelis	8.3	.1	0	0	8.4	99.1	c/	.4
Minor	1.8	.3	.2	.4	2.7	65.5	.1	1.2

^{a/} The other auctions include Boston, Cincinnati, Cleveland, Detroit, Pittsburgh, and St. Louis plus Baltimore until the end of 1956.

^{b/} Converted to equivalent standard boxes at 1 box equal (approximately) to 2 half boxes, 2 lugs, 1 San Francisco lug, and 2 other containers. Figure in column 9 indicates percent of total sales (in all packs) sold in containers other than standard box. During 1950-59, over half (53 percent) of these sales were in lugs, under half (42 percent) in half boxes and a small quantity (5 percent) in miscellaneous containers. Lugs were used for most of the Bartletts (90 percent) and two-thirds of the Early Bartletts and Wilder. Half boxes were used for 85 percent of the Forelle and Seckel.

^{c/} Less than 50 boxes.

Source: California Federal-State Market News Service, "Pears: Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1950-59.

TABLE 34

California Bartlett Pears: Weekly Auction Sales and Prices, All Markets,
Box Pack Only, 1935-59

Week ^{a/}	Sales					Price				
	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6	7	8	9	10	11
	percent of season total ^{b/}					percent of season average ^{b/}				
1	0.1	0.3	0.2	0.1	c/	147.2	158.2	184.6	154.7	133.0
2	2.6	4.6	2.2	2.7	4.0	130.3	116.1	154.8	132.7	124.4
3	7.4	8.8	6.8	8.2	8.2	108.7	102.1	118.1	104.3	100.7
4	10.9	9.3	10.7	8.7	8.5	95.2	97.6	99.5	93.9	92.2
5	11.3	9.6	11.0	8.3	8.5	91.3	98.9	96.8	96.5	97.3
6	10.9	11.0	11.4	9.0	7.9	95.7	100.8	98.9	99.2	98.8
7	10.7	12.8	11.3	9.5	9.1	100.0	93.3	98.4	95.3	94.6
8	9.7	12.1	11.2	9.2	8.9	100.0	90.1	96.2	93.3	91.6
9	8.1	9.4	11.7	8.1	7.0	101.3	98.1	93.0	96.7	95.2
10	8.4	6.9	8.4	8.4	7.0	97.8	108.6	101.4	101.4	101.7
11	6.8	5.6	6.4	8.2	6.6	98.7	112.3	107.7	103.3	103.6
12	4.9	4.1	4.2	7.3	5.9	105.2	110.2	116.1	103.5	106.1
13	3.4	2.9	2.7	5.6	5.5	114.3	108.6	115.4	106.1	107.2
14	2.6	1.7	1.2	3.5	4.9	113.9	112.1	108.8	115.5	108.6
15	1.5	0.4	0.5	1.9	3.3	109.1	82.0	84.2	120.8	112.4
16	0.6	0.3	0.1	0.9	2.3	111.3	72.4	87.8	114.9	116.8
17	0.1	0.2	d/	0.3	1.4	107.8	49.3	75.1	94.9	112.6
18	d/	d/	d/	0.1	0.7					
Later	d/	d/	d/	d/	0.3)					
	season sales--1,000 boxes ^{d/}					season price--dollars per box ^{d/}				
	1880.9	1470.6	1343.9	1353.7	1066.5	2.31	3.73	4.42	4.90	5.24

a/ Arbitrary numbering of first week of season's sales of Bartlett Pears as "week 1," and succeeding weeks as "2," "3," etc. In some years, week 1 includes small quantities sold in prior weeks. See table 37 for average calendar dates of the weeks.

b/ Percentages are computed on 5-year averages.

c/ Less than 0.05 percent.

d/ Average sales and prices for the 5-year periods shown.

Source: California Federal-State Market News Service, "Pears: Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1935-59.

TABLE 35

California Pears Other Than Bartlett: Weekly Auction Sales and
Prices, All Markets, Box Pack Only, 1935-59

Week ^{a/}	Sales					Price				
	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959	1935- 1939	1940- 1944	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6	7	8	9	10	11
	percent of season total ^{b/}					percent of season average ^{b/}				
1	.4	1.2	1.1	.7	1.6	108.2	127.0	153.4	141.6	134.7
2	.2	1.0	.9	2.2	2.8	103.1	110.5	159.6	131.0	111.1
3	.1	.5	.9	1.9	1.0	101.5	92.7	123.8	96.9	93.4
4	c/	.5	.4	.3	.3	86.1	92.4	101.8	89.7	84.0
5	0	.6	.2	c/	.1	--	89.0	78.5	98.0	95.9
6	c/	.6	.5	.1	.2	79.9	93.0	109.1	104.7	90.6
7	.2	1.6	.4	.2	c/	92.8	95.0	103.4	96.4	85.0
8	.3	1.6	1.3	.1	.1	106.2	87.8	97.9	122.2	72.7
9	.4	4.4	1.7	.1	.4	97.4	88.7	84.5	97.5	67.8
10	.5	6.9	4.0	.6	1.8	103.6	98.3	90.4	96.9	89.9
11	1.4	10.5	4.7	3.6	5.0	90.7	102.6	89.4	96.0	87.7
12	2.4	9.1	8.1	4.4	8.1	95.4	97.7	103.4	95.1	91.2
13	7.4	11.1	9.3	4.1	8.8	104.1	98.0	101.8	95.3	89.3
14	11.6	8.3	7.3	5.3	7.3	101.5	98.5	104.7	102.7	92.6
15	10.7	7.3	6.8	8.7	7.9	95.4	99.1	99.2	100.0	97.3
16	11.9	7.1	5.8	8.2	8.4	96.4	103.2	98.7	95.3	97.9
17	8.7	5.8	6.4	6.6	7.3	103.1	105.8	101.0	101.3	101.2
18	9.6	4.9	5.1	6.4	7.8	107.2	105.8	103.1	102.7	100.2
19	9.6	3.5	4.6	7.0	7.0	103.1	109.0	110.4	101.6	103.1
20	7.6	2.9	4.7	6.1	5.6	103.6	112.8	109.3	104.0	110.1
21	6.6	3.0	5.1	4.6	3.5	95.9	107.0	110.1	96.4	110.3
22	4.6	2.7	3.3	4.5	2.9	93.8	112.2	107.3	91.2	110.1
23	3.0	2.5	2.4	4.1	2.3	89.7	110.8	114.8	92.8	109.0
Later	2.8	2.4	15.0	20.2	9.8	94.3	84.3	85.0	96.9	113.8
	season sales--1,000 boxes ^{d/}					season price--dollars per box ^{d/}				
	174.7	187.2	268.5	254.1	204.8	1.94	3.43	3.85	4.41	4.88

a/ Arbitrary numbering of first week of season's sales as "week 1" and succeeding weeks as "2", "3", etc. In some years week 1 includes small quantities sold in prior weeks. Quantities sold after December 31 were first reported in 1947. See table 37 for average calendar dates of the weeks.

b/ Percentages are computed on five-year averages.

c/ Less than 0.05 percent.

d/ Average sales and prices for the five-year periods shown.

Source: California Federal-State Market News Service, "Pears: Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1935-59.

TABLE 36

California Pears Other Than Bartlett: Weekly Auction Sales^{a/} All Markets, by Variety, 1955-59 Average

Week ^{b/}	Wilder	Early Bartlett	Seckel	Hardy	Anjou	Bosc	Comice	Forelle	Other ^{c/}	Total	Percent season
1	2	3	4	5	6	7	8	9	10	11	12
0	1,810	130							0	1,940	.9
1	3,320	2,810							140	6,270	2.8
2	830	5,540							230	6,600	3.0
3		1,980							190	2,170	1.0
4		380							310	690	.3
5		20							200	220	.1
6		150		70					230	450	.2
7			260	60					20	340	.2
8			980	0	120				100	1,200	.5
9			1,430	0	0	550	200		0	2,180	1.0
10			1,660	150	110	3,260	120		0	5,300	2.4
11			1,270	850	970	7,490	550		290	11,420	5.1
12			1,000	780	1,410	12,810	1,210		230	17,440	7.9
13			810	1,010	730	14,330	1,210		350	18,440	8.3
14			490	1,060	400	11,250	1,630	220	290	15,340	6.9
15			520	820	710	11,610	2,260	620	110	16,650	7.5
16			290	900	1,030	11,780	2,800	510	160	17,470	7.9
17			100	920	710	8,610	3,870	620	0	14,830	6.7
18			0	780	1,350	7,800	5,380	670	0	15,980	7.2
19			90	600	1,000	7,050	4,810	1,100	70	14,720	6.6
20			40	550	220	6,080	3,940	700	40	11,570	5.2
21				150	200	2,850	3,530	670	0	7,400	3.3
22						1,990	3,350	790	20	6,150	2.8
23						720	3,190	1,030	120	5,060	2.3
24						450	5,080	800	100	6,430	2.9
25						80	1,360	250	0	1,690	.8
Later			20		150	140	4,320	1,170	8,010	13,810	6.2
Season	5,960	11,010	8,960	8,700	9,110	108,850	48,810	9,150	11,210	221,760	100.0
Percent	2.7	5.0	4.0	3.9	4.1	49.1	22.0	4.2	5.0	100.0	

(Continued on next page.)

Table 36 continued.

- a/ Packs other than standard boxes converted to equivalent boxes. All sales data rounded to ten boxes. Marketing periods for these varieties are tabulated below. The dates indicate the periods during which the middle 80 percent of auction sales took place in 1955-59:

Variety	Period
Wilder	July 5-17
Early Bartlett	July 11-25
Seckel	Aug. 23-Oct. 16
Hardy	Sept. 20-Nov. 15

Variety	Period
Anjou	Sept. 19-Nov. 28
Bosc	Sept. 21-Nov. 18
Comice	Oct. 12-Dec. 30
Forelle	Oct. 22-Jan. 15

This period covers about 11 weeks (July 26-October 10) for Bartletts and 14 weeks (September 10-December 14) for other varieties.

- b/ Arbitrary numbering of first week of season's sales of Bartlett Pears as "week 1" and succeeding weeks as "2," "3," etc. Thus week "0" refers to sales made before Bartlett sales begin. See table 37 for average calendar dates of the weeks.
- c/ Includes Hill Bartlett and Red Bartlett (mainly in weeks 2-8), Eureka (mainly in weeks 10-16) and Winter Nelis (mainly in week 23 and later).

Source: California Federal-State Market News Service, "Pears: Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1955-59.

TABLE 37

California Pears: Weekly Auction Sales^{a/} and Prices by Type of Pack, All Markets, 1955-59 Average

Week ^{b/}	Date ^{c/}	Bartlett Pear sales			Other pear sales			All pear sales		Price ^{d/}		
		Box pack	Other packs	Total	Box pack	Other packs	Total	Total	Percent Bartlett	Bartlett Pears	Other pears	Difference
1	2	3	4	5	6	7	8	9	10	11	12	13
0	July 6	0	0	0	130	1,810	1,940	1,940	0.0	--	--	--
1	July 13	270	0	270	3,030	6,270	6,540	6,540	4.2	6.97	6.56	.41
2	July 20	42,270	0	42,270	5,650	950	6,600	48,870	86.5	6.52	5.41	1.11
3	July 27	87,260	30	87,290	2,110	60	2,170	89,460	97.6	5.28	4.55	.73
4	Aug. 3	90,970	60	91,030	670	20	690	91,720	99.2	4.83	4.09	.74
5	Aug. 10	90,830	10	90,840	220	0	220	91,060	99.8	5.10	4.67	.43
6	Aug. 17	84,520	80	84,600	450	0	450	85,050	99.5	5.18	4.41	.77
7	Aug. 24	96,690	100	96,790	80	260	340	97,130	99.6	4.96	4.14	.82
8	Aug. 31	95,160	980	96,140	220	980	1,200	97,340	98.8	4.80	3.54	1.26
9	Sept. 7	74,840	140	74,980	750	1,430	2,180	77,160	97.2	4.99	3.30	1.69
10	Sept. 14	74,310	180	74,490	3,640	1,660	5,300	79,790	93.4	5.33	4.38	.95
11	Sept. 21	70,790	40	70,830	10,150	1,270	11,420	82,250	86.1	5.43	4.27	1.16
12	Sept. 28	62,790	140	62,930	16,480	960	17,440	80,370	78.3	5.56	4.44	1.12
13	Oct. 5	58,930	150	59,080	17,920	520	18,440	77,520	76.2	5.62	4.35	1.27
14	Oct. 12	52,050	210	52,260	14,900	440	15,340	67,600	77.3	5.69	4.51	1.18
15	Oct. 19	34,990	70	35,060	16,220	430	16,650	51,710	67.8	5.89	4.74	1.15
16	Oct. 26	24,740	250	24,990	17,140	330	17,470	42,460	58.9	6.12	4.77	1.35
17	Nov. 2	15,060	230	15,290	14,800	30	14,830	30,120	50.8	6.03	4.93	1.10
18	Nov. 9	7,000	170	7,170	15,790	190	15,980	23,150	31.0	5.95	4.88	1.07
19	Nov. 16	2,110	0	2,110	14,330	390	14,720	16,830	12.6		5.02	
20	Nov. 23	880	0	880	11,420	150	11,570	12,450	7.1		5.36	
21	Nov. 30	0	0	0	7,050	350	7,400	7,400	0.0		5.37	
22	Dec. 7	0	60	60	5,890	260	6,150	6,210	1.0		5.36	
23	Dec. 14	0	110	110	4,640	420	5,060	5,170	0.2		5.31	
24	Dec. 21	0	0	0	6,210	220	6,430	6,430	0.0		5.58	
25	Dec. 28	0	0	0	1,670	20	1,690	1,690	0.0		5.87	
Later		0	0	0	13,310	500	13,810	13,810	0.0		5.19	
Season		1,066,460	3,010	1,069,470	204,870	16,890	221,760	1,291,230	92.8	5.24	4.88	.36

(Continued on next page.)

Table 37 continued.

a/ Packs other than standard boxes converted to equivalent boxes. All sales data rounded to ten boxes.

b/ Arbitrary numbering of first week of season's sales of Bartlett Pears as "week 1" and succeeding weeks as "2," "3," etc. Week "0" refers to sales during the week before Bartlett sales begin.

c/ Average date (end of week) for five years 1955-59, which equals average for 1950-59.

d/ Price (dollars per box) for sales in standard boxes only. These figures are simple averages for the five individual years. Averages for other pears are based on fewer than five years in weeks 5-9 since sales were not made during each of these weeks in every year. The differences in column 13 are premiums for Bartlett Pears.

Source: California Federal-State Market News Service, "Pears Weighted Average Prices Received at Eastern Auction Markets," annual summary reports for 1955-59.

TABLE 38

Dried Pears: United States Pack, Shipments, and F.o.b. Price, 1925-60

Year a/	Pack	Exports (beginning July) a/ b/			% of pack	Domestic shipments c/	F.o.b. price d/
		As pears	In dried salad	Total			
1	2	3	4	5	6	7	8
	dry tons--unprocessed weight				percent	dry tons	cents
Average							
1925-29	4,220	2,480	640	3,120	73.3	1,100	11.9
1930-34	5,260	3,380	1,080	4,460	86.8	800	6.8
1935-39	6,680	3,340	1,140	4,480	74.3	2,200	6.9
1940-44	3,540	1,820	140	1,960	53.5	1,580	15.3
1945-49	3,160	560	400	960	32.1	2,200	21.3
1950-54	2,130	510	340	850	40.0	1,280	28.1
1955-59	2,240	690	540	1,230	54.9	1,010	33.5
Annual							
1940	3,100	400	300	700	22.6	2,400	6.0
1941	3,700	3,100	400	3,500	94.6	200	8.1
1942	2,700	1,100	--	1,100	40.7	1,600	16.1
1943	4,100	2,000	--	2,000	48.8	2,100	23.1
1944	4,100	2,500	--	2,500	61.0	1,600	23.1
1945	5,400	500	500	1,000	18.5	4,400	22.3
1946	4,600	600	1,500	2,100	45.7	2,500	24.5
1947	2,600	400	--	400	15.4	2,200	18.5
1948	1,000	400	--	400	40.0	600	22.4
1949	2,200	900	--	900	40.9	1,300	18.6
1950	1,910	570	60	630	33.0	1,280	26.6
1951	1,560	380	190	570	36.5	990	24.0
1952	1,750	600	560	1,160	66.3	590	24.2
1953	1,940	560	510	1,070	55.2	870	26.5
1954	3,510	450	400	850	24.2	2,660	39.1
1955	3,700	820	620	1,440	38.9	2,260	27.7
1956	2,740	790	550	1,340	48.9	1,400	28.2
1957	1,910	1,080	680	1,760	92.1	150	27.6
1958	1,020	380	430	810	44.5	210	42.0
1959 ^{e/}	1,820	350	430	780	42.9	1,040	42.2
1960 ^{e/}	1,600						42.0
1961							
1962							

a/ Pears are mostly sun-dried beginning about July. Exports are given for the twelve months beginning September 1, for 1925-49 and July 1, for 1950-60.

b/ Pears estimated at one-sixth of dried fruit salad exports. Equivalent natural condition unprocessed weight derived by dividing declared net processed weight by 1.03.

c/ Represents the difference between pack and exports.

d/ Simple average of September 1 - December 31, lowest weekly quotations in California Fruit News of packer prices, f.o.b. California, choice northern Bartlett halves, except 1942-45 which are OPA ceiling prices and 1960 which are determined from normal relation to choice Lake pears--cents per pound.

e/ Preliminary

Source: Shear, S.W. and R.E. Blair, "California Fruit Statistics and Related Data", University of California, Berkeley, June 1958 (California Agr. Expt. Sta. Bul. 763), supplemented by 1950-60 data from the sources quoted in Bul. 763.

TABLE 39

Canned Pears: Pacific Coast Pack, Shipments, and F.o.b. Prices, 1925-60^{a/}

Year beginning June	Canners' supply			Canners' shipments b/				F.o.b. price c/ dollars
	Pack	Begin- ning stocks	Total	Exports	Domestic	Total	Percent exported	
1	2	3	4	5	6	7	8	9
Average			1,000 cases--basis 24 No. 2 1/2 cans				Percent	dollars
1925-29	3,530	284	3,814	1,462	1,888	3,350	43.6	5.07
1930-34	4,157	683	4,840	1,578	2,512	4,090	38.6	3.20
1935-39	4,411	930	5,341	1,567	3,046	4,613	34.0	3.28
1940-44	4,964	786	5,750	262	3,130	4,930	5.3	4.81
1945-49	4,927	471	5,398	235	4,568	4,915	4.8	6.75
1950-54	6,185	939	7,124	163	5,307	5,966	2.7	7.20
1955-59	8,113	2,017	10,130	372	7,277	8,019	3.4	6.53
Annual								
1940	4,824	280	5,104	54	3,973	4,204	1.3	3.35
1941	5,900	900	6,800	371	4,738	5,900	6.3	4.40
1942	5,389	900	6,289	91	3,615	5,339	1.7	4.85
1943	4,434	950	5,384	534	2,085	4,484	11.9	5.75
1944	4,274	900	5,174	258	1,238	4,744	5.5	5.70
1945	4,465	430	4,895	281	4,200	4,625	6.0	5.75
1946	5,256	240	5,496	370	4,500	5,296	7.0	7.50
1947	5,622	200	5,822	230	4,866	5,096	4.5	7.10
1948	5,831	726	6,557	136	3,660	3,796	3.6	8.10
1949	5,459	761	6,220	159	5,613	5,772	2.8	5.30
1950	6,048	448	6,496	215	4,815	5,930	3.6	7.80
1951	6,215	566	6,781	95	4,348	5,206	1.8	7.86
1952	6,003	1,575	7,578	131	5,700	6,217	2.1	6.49
1953	5,185	1,361	6,546	116	5,401	5,799	2.0	6.91
1954	7,475	747	8,222	260	6,272	6,677	3.9	6.92
1955	7,849	1,545	9,394	746	6,763	7,785	9.6	6.72
1956	8,433	1,609	10,046	288	6,789	7,459	3.9	6.89
1957	8,157	2,587	10,745	316	7,746	8,334	3.8	6.25
1958	7,271	2,411	9,682	232	7,077	7,750	3.0	6.88
1959	8,853	1,932	10,785	280	8,009	8,767	3.2	6.15
1960	7,877	2,018	9,895	230	6,998	7,559	3.0	6.50
1961								
1962								

a/ Quantities repacked by California canners into fruit cocktail, fruit salad, etc. are included in pack and shipments.

b/ Practically all exports are Pacific Coast Bartlett Pears. Exports include government shipments for lend-lease and overseas civilian relief (but not shipments to U.S. military services abroad) in addition to commercial shipments during 1940-47. Beginning 1940 total shipments include (in addition to commercial shipments, export and domestic, shown in columns 5 and 6) government purchases for war services at home and abroad.

c/ Weighted f.o.b. sales prices for choice grade, per case of 24 No. 2 1/2 cans. Prices for 1941-46 are very approximate estimates.

Source: Shear, S.W. and R.E. Blair, "California Fruit Statistics and Related Data," University of California, Berkeley, June 1958 (Calif. Agr. Expt. Sta. Bul. 763); and S.S. Hoos and G.M. Kuznets, "Pacific Coast Canned Fruits: f.o.b. Price Relationships, 1960-61," University of California, Berkeley, July 1961 (Giannini Foundation, Research Report No. 246).

TABLE 40

Canned Pears: U. S. Pack, by Can Size and State, 1933-59

Can size and state ^{a/}	1933-1936	1937-1940	1943-1946 ^{b/}	1947-1949	1950-1954	1955-1959
1	2	3	4	5	6	7
1,000 actual cases						
No. 10	875	944	1,547	932	1,176	1,721
No. 2 1/2	3,240	2,671	3,253	3,282	3,515	4,339
No. 2	515	541	27	228	165	8
No. 1 Tall	558	618	0	433		
No. 303 & 300			0	352	2,157	3,783
8 Oz.	239	296	0	283	817	909
Misc.	81	64	78	92	145	45
Total	5,508	5,134	4,905	5,602	7,975	10,805
California	2,164	1,550	1,532	1,626	2,956	5,363
Oregon	1,455	1,385	1,321			
Washington	1,441	1,575	1,906	3,667	4,529	4,854
Michigan	357	515				
New York	81	103				
Other states	10	6	146	309	490	588
1,000 cases--basis of 24 No. 2 1/2 cans						
United States	5,309	4,925	4,770	5,210	6,630	8,635
California	2,098	1,501	1,492	1,571	2,499	4,326
% California	39.5	30.5	31.3	30.2	37.7	50.1
percent of U. S. pack--actual cases						
No. 10	15.9	18.4	31.5	16.6	14.7	15.9
No. 2 1/2	58.8	52.0	66.3	58.6	44.1	40.2
No. 2	9.4	10.6	.6	4.1	2.1	.1
No. 1 Tall	10.1	12.0	0	7.7		
No. 303 & 300	0	0	0	6.3	27.1	35.0
8 Oz.	4.3	5.8	0	5.1	10.2	8.4
Misc.	1.5	1.2	1.6	1.6	1.8	.4

a/ No. 303 and 300 for 1933-46 and No. 1 Tall and 8 oz. for 1943-46 included in Misc. Small pack of No. 1 Tall for 1950-59 included in No. 303 and 300. Oregon and Washington packs not separated for 1947-59. Michigan and New York packs for 1943-59 included in "Other states."

b/ Packs in smaller can sizes restricted by wartime tin order issued by War Production Board.

Source: National Cannery Association, "Canned Food Pack Statistics" and Cannery League of California, "California Canned Fruit Pack Statistics," annual issues.

TABLE 41

Canned Fruit Mixes: California Pack by Can Size, 1933-59

Can size and item ^{a/}	1933-1936	1937-1940	1943-1946 ^{b/}	1947-1949	1950-1954	1955-1959
1	2	3	4	5	6	7
	1,000 actual cases					
<u>Fruit cocktail</u>						
No. 10		366	1,329	797	1,187	1,473
No. 2 1/2		718	4,862	4,366	3,573	3,971
No. 2		56	8	76	294	235
No. 1 Tall		1,702	254	1,796	701	
No. 303 & 300				1,166	3,128	7,637
8 Oz.		304	7	739	1,381	1,796
Misc.		66	15	159	37	2
Total	1,440	3,212	6,475	9,099	10,301	15,114
<u>Fruits for salad</u>						
No. 10		43	0	13	54	122
No. 2 1/2		438	137	429	333	283
No. 2		42	0	7	5	0
No. 1 Tall		370	0	79	36	
No. 303 & 300		0	0	187	442	570
8 Oz.		187	0	91	130	159
Misc.		4	0	224	2	0
Total	1,420	1,084	137	1,030	1,002	1,134
<u>Mixed fruits</u>						
No. 10			23	117	47	158
No. 2 1/2			369	117	65	113
No. 303 & 300			0		12	38
Misc.			0	27	3	2
Total	0	0	392	261	127	311
<u>All fruit mixes</u>						
No. 10		409	1,352	927	1,288	1,753
No. 2 1/2		1,156	5,368	4,912	3,971	4,367
No. 2		98	8	83	299	235
No. 1 Tall		2,072	254	1,875	737	
No. 303 & 300				1,353	3,582	8,245
8 Oz.		491	7	830	1,511	1,955
Misc.		70	15	410	42	4
Total	2,860	4,296	7,004	10,390	11,430	16,559
	1,000 cases--basis of 24 No. 2 1/2 cans					
Fruit cocktail	1,475	3,320	6,396	8,519	8,254	10,058
Fruits for salad	1,420	1,087	137	833	758	814
Mixed fruits	0	0	390	261	119	281
Total	2,895	4,407	6,923	9,613	9,131	11,953
% Fruit cocktail	51.0	75.3	92.4	88.6	90.4	90.8
	percent of pack--actual cases					
No. 10		9.5	19.3	8.9	11.3	10.6
No. 2 1/2		26.9	76.7	47.3	34.7	26.4
No. 2 & 1 Tall		50.5	3.7	18.8	9.1	1.4
No. 300, 303 & Misc.		1.7	.2	17.0	31.7	49.8
8 Oz.		11.4	0.1	8.0	13.2	11.8

(Continued on next page.)

Table 41 continued.

a/ Small pack of No. 1 Tall for 1955-59 included in No. 303 and 300. No. 303 and 300 included in Misc. for earlier years--1937-46 for fruit cocktail and 1947-49 for mixed fruits. Mixed fruits not packed until 1943. Packs of fruit cocktail included with fruits for salad in 1933 and earlier. The 1933-36 averages given here include a rough estimate of segregation for 1933.

b/ Packs in smaller can sizes and of fruits for salad restricted by wartime tin order issued by War Production Board.

Source: National Cannery Association, "Canned Food Pack Statistics"; and Cannery League of California, "California Canned Fruit Pack Statistics," annual issues.

TABLE 42

Pears: U. S. Exports and Imports, 1925-59^{a/}

Year	Domestic exports ^{b/}						Imports for fresh use
	Canned	Canned in fruit salad	Dried	Dried in fruit salad	Fresh	Total, fresh basis ^{c/}	
1	2	3	4	5	6	7	8
tons--declared net weight							
<u>Average</u>							
1925-29	33,201				34,101		
1930-34	35,645	5,679	3,446	1,126	55,700	130,430	22
1935-39	34,753	7,031	3,414	1,215	65,424	141,020	2,131
1940-44	5,999	863	1,856	146	7,491	26,740	5,250
1945-49	5,169	3,777	580	426	26,534	42,800	5,098
1950-54	4,144	6,959	528	354	17,963	36,140	5,550
1955-59	8,343	12,007	704	556	30,540	61,890	7,570
<u>Annual</u>							
1950	4,838	5,512	582	65	19,898	35,880	4,764
1951	2,214	6,039	397	194	17,054	30,210	8,550
1952	2,934	7,587	622	576	16,965	36,180	6,342
1953	2,615	6,658	578	524	18,582	35,770	3,442
1954	8,122	8,998	460	412	17,314	42,650	4,652
1955	14,617	9,360	844	635	19,996	56,900	10,608
1956	6,626	12,556	815	565	25,062	55,670	6,444
1957	7,135	12,968	1,112	698	41,564	75,640	7,359
1958 ^{d/}	5,036	11,852	390	440	25,080	49,910	6,254
1959 ^{d/}	8,300	13,300	360	440	41,000	71,320	7,190
1960							
1961							
1962							

^{a/} Years beginning July 1. There are minor discrepancies between data given here and those in the following table due to reporting differences.

^{b/} Pears estimated at 35 percent of canned fruit salad and one-sixth of dried fruit salad.

^{c/} Canned pears converted to fresh basis at 1 pound canned equal 1.2 pounds fresh. Dried pears converted to fresh basis at 1 pound dried equal 5.5 pounds fresh.

^{d/} Preliminary--based on estimates from other sources.

Source: U. S. Department of Agriculture, "Agricultural Statistics," 1957 and 1960 issues.

TABLE 43

Pears: U. S. Exports, by Country of Destination, 1925-59^{a/}

Destination ^{b/}	1925- 1929 ^{c/}	1930- 1933	1934- 1938	1940- 1944	1946- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6	7	8
tons--declared net export weight							
<u>Fresh pears</u>						^{a/}	
United Kingdom	13,853	29,178	31,935	27	8,476	--	3,925
France	10	6,562	8,765	--	--	260	423
Netherlands	306	4,461	3,540	--	218	516	1,450
Other Europe	271	4,265	5,966	52	3,708	2,595	7,251
Canada	12,934	8,403	9,104	4,465	6,705	7,574	11,255
Latin America	2,982	2,175	3,816	2,772	7,366	6,691	5,502
Other	1,694	2,002	3,056	175	581	327	107
Total	32,050	57,046	66,182	7,491	27,054	17,963	29,913
<u>Canned pears^{e/}</u>							
United Kingdom	28,461	33,632	33,249	2,034	1,050	585	3,010
Other Europe	1,301	1,095	1,175	324	626	605	1,535
Canada	574	171	46	86	204	475	1,320
Latin America	528	121	545	598	2,478	2,480	2,090
Other	1,153	615	684	2,975	657	301	350
Total	32,017	35,634	35,699	6,017	5,015	4,446	8,305
<u>Dried pears^{e/}</u>							
United Kingdom		418	496	915	17	11	125
France		686	1,208	--	10	--	8
Germany		1,686	275	--	55	112	207
Other Europe		668	1,220	258	190	256	239
Canada		70	164	53	69	60	35
Latin America		31	51	39	132	79	62
Other		39	75	587	99	10	15
Total	2,554	3,598	3,489	1,852	572	528	691
total tons--fresh fruit equivalent ^{f/}							
United Kingdom		59,210	62,060	6,590	9,440	540	7,080
Other Europe		32,420	33,680	1,700	5,800	5,840	12,820
Canada		8,920	10,020	4,820	7,240	8,290	12,530
Latin America		2,440	4,540	3,470	10,120	9,160	7,560
Other		2,720	4,020	5,770	1,650	630	480
Total	72,150	105,710	114,320	22,350	34,250	24,460	40,470
percent of total--fresh fruit equivalent ^{f/}							
Fresh	44.4	54.0	57.9	33.5	79.0	73.5	73.9
Canned	36.7	27.8	25.8	22.3	12.1	15.0	17.0
Dried	18.9	18.2	16.3	44.2	8.9	11.5	9.1

(Continued on next page.)

Table 43 continued.

- a/ Years beginning July 1 for 1925-54 and calendar years for 1955-59. There are minor discrepancies between data given here and those in the preceding table due to reporting differences.
- b/ "Latin America" includes Western Hemisphere except Canada. Exports of fresh and canned pears to some Latin American countries are included in "Other" for 1925-33.
- c/ Includes 1924-28 for fresh pears and 1926-29 for canned pears. Data for dried pears for 1925-29 are approximated on the basis of exports reported in table 38 converted from unprocessed weight by multiplying by 1.03.
- d/ Dashes indicate data, if any, included in "Other Europe."
- e/ Excludes pears shipped in canned and dried fruit salad.
- f/ Canned converted to fresh basis at 0.8265 to 1.0--i.e., 38 cases (of 43.5 pounds) per ton of fresh pears. Dried converted to fresh basis at 5.34 to 1.0--i.e., combining the dry-out ratio (5.5 to 1.0) and the processing factor (1.03) into one figure.
- Source: Shear, S. W. and R. E. Blair, "California Fruit Statistics and Related Data," University of California, Berkeley, June 1958 (Calif. Agr. Expt. Sta. Bul. 763); and U. S. Bureau of Census, "United States Exports of Domestic and Foreign Merchandise: Commodity by Country of Destination" (Rept. No. FT410, Part I), for calendar years 1955-59.

TABLE 44

Pears: U. S. Production and Utilization, by Major States,
(in 1,000 bushels), 1925-59

State	Production a/		Farm use	Sales b/			
	Total	% of U. S.		Total ^{a/}	Fresh	Canned	Other ^{c/}
1	2	3	4	5	6	7	8
1935-39							
California	9,751	34.0	55	9,404	5,058	2,868	1,478
Oregon	3,816	13.3	148	3,504	2,685	817	2
Washington	6,429	22.4	238	5,546	2,922	2,569	55
Michigan	1,195	4.2	142	1,053	632	421	0
New York	1,071	3.7	105	943	840	103	0
Other States	6,432	22.4	2,173	4,188	4,188	0	0
U. S. Total	28,694		2,861	24,638	16,325	6,778	1,535
1940-44							
California	10,284	35.6	54	10,072	4,003	5,260	809
Oregon	3,937	13.6	161	3,696	2,858	786	52
Washington	6,796	23.5	279	6,284	3,103	3,107	74
Michigan	952	3.3	104	848	460	388	0
New York	996	3.4	94	885	787	98	0
Other States	5,943	20.6	2,074	3,847	3,836	11	0
U. S. Total	28,908		2,766	25,632	15,047	9,650	935
1945-49							
California	13,526	43.0	54	13,173	5,028	7,510	635
Oregon	5,558	17.7	178	5,289	4,277	881	131
Washington	7,332	23.3	275	6,774	3,485	3,066	223
Michigan	576	1.8	84	478			
New York	480	1.5	56	428			
Other States	3,987	12.7	1,733	2,213	2,843	252	24
U. S. Total	31,459		2,380	28,355	15,633	11,709	1,013
1950-54							
California	14,501	50.8	50	14,451	4,243	9,821	387
Oregon	4,976	17.5	152	4,755	3,451	1,154	150
Washington	5,229	18.3	169	5,029	2,038	2,690	294
Michigan	905	3.2	84	813			
New York	475	1.7	55	408			
Other States	2,415	8.5	1,094	1,322	1,924	626	0
U. S. Total	28,501		1,604	26,778	11,656	14,291	831
1955-59							
California	16,185	54.0	48	16,012	4,219	11,388	405
Oregon	5,594	18.7	146	5,396	4,029	1,367	0
Washington	4,808	16.1	77	4,707	2,156	2,470	79
Michigan	1,176	3.9	47	1,125			
New York	622	2.1	28	594			
Other States	1,555	5.2	481	1,067	1,733	1,055	0
U. S. Total	29,940		827	28,901	12,137	16,280	484

(continued on next page.)

Table 44 continued.

- a/ Differences between production and sales include farm use (shown) and economic abandonment (not shown). Production for 1925-34 (in 1,000 bushels) was as follows:

State	1925-29	1930-34
California	8,184	9,934
Oregon	2,422	2,799
Washington	3,112	4,646
Michigan	557	936
New York	1,476	1,496
Other States	6,076	6,002
U. S. Total	21,827	25,813

- b/ Utilization data for Michigan and New York in 1945-59 are included with "other states." Processing of non-Pacific Coast pears is almost entirely confined to canning in Michigan and New York
- c/ Mostly pears used for drying in California and Washington and for crushing in Oregon and "other states."

Source: U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service publications: "Fruits (noncitrus), Production, Farm Disposition, Value, and Utilization of Sales, 1889-1944," (Pub. CS-27), May 1948; "..., 1944-1949," (Stat. Bul. No. 114), October 1952; "..., 1954-1979," (Stat. Bul. No. 292), August 1961.

TABLE 45

Bartlett Pears: Pacific Coast Production and Utilization,
by States (in fresh tons), 1925-59

Year	Production		Farm use	Sales ^{a/}				
	Total	Of no value		Total	Fresh	Canned	Dried	Other ^{b/}
1	2	3	4	5	6	7	8	9
California								
1925-29	179,600	800	2,100	176,700	98,660	54,960	23,080	0
1930-34	208,800	28,600	1,500	178,700	98,860	51,000	28,840	0
1935-39	202,800	5,600	1,120	196,080	92,100	68,540	35,440	0
1940-44	219,800	3,000	1,100	215,700	81,880	114,560	18,120	1,140
1945-49	281,600	5,800	1,080	274,720	100,500	159,720	14,160	340
1950-54	306,400	0	1,000	305,400	88,620	207,480	9,300	0
1955-59	347,200	2,400	940	343,860	84,160	249,980	9,720	0
Oregon								
1925-29	25,392	0	2,622	22,770	9,180	13,590	0	0
1930-34	26,516	0	2,806	23,710	9,650	14,060	0	0
1935-39	38,190	2,154	2,816	33,220	12,780	20,380	0	60
1940-44	42,670	200	3,096	39,374	19,689	19,560	0	125
1945-49	54,705	1,075	3,470	50,160	27,650	21,900	0	610
1950-54	49,050	145	2,925	45,980	16,405	28,775	0	800
1955-59	59,100	605	2,690	55,805	22,000	33,805	0	0
Washington								
1925-29	56,924	0	2,724	54,200	25,840	28,360	0	0
1930-34	79,886	2,000	4,004	73,882	23,352	50,530	0	0
1935-39	108,420	8,970	4,290	95,160	30,889	63,100	1,136	35
1940-44	128,370	3,038	5,440	119,892	41,578	77,454	570	290
1945-49	135,630	6,175	5,370	124,085	44,280	75,895	1,270	2,640
1950-54	94,800	770	3,080	90,950	18,695	67,320	0	4,935
1955-59	82,750	615	1,325	80,810	18,110	61,780	0	920
Three state total								
1925-29	261,916	800	7,446	253,670	133,680	96,910	23,080	0
1930-34	315,202	30,600	8,310	276,292	131,862	115,590	28,840	0
1935-39	349,410	16,724	8,226	324,460	135,769	152,020	36,576	95
1940-44	390,840	6,238	9,636	374,966	143,147	211,574	18,690	1,555
1945-49	471,935	13,050	9,920	448,965	172,430	257,515	15,430	3,590
1950-54	450,250	915	7,005	442,330	123,720	303,575	9,300	5,735
1955-59	489,050	3,620	4,955	480,475	124,270	345,565	9,720	920

a/ In 1950-59 some quantities processed in different outlets are combined (for one outlet) or are included with fresh sales to avoid disclosure of individual operations.

b/ Other processing includes mostly quantities crushed for spirits.

Source: U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service publications: "Fruits (noncitrus), Production, Farm Disposition, Value, and Utilization of Sales, 1889-1944," (Pub. CS-27), May 1948; "..., 1944-1949," (Stat. Bul. No. 114), October 1952; "..., 1954-1959," (Stat. Bul. No. 292), August 1961.

TABLE 46

Pears Other Than Bartlett: Pacific Coast Production and Utilization
by States (in fresh tons), 1925-59

Year	Production		Farm use	Sales ^{a/}				
	Total	Of no value		Total	Fresh	Canned	Dried	Other ^{b/}
1	2	3	4	5	6	7	8	9
California								
1925-29	16,800	0	220	16,580	16,580	0	0	0
1930-34	29,600	3,000	200	26,400	26,400	0	0	0
1935-39	31,200	1,400	200	29,600	29,280	280	40	0
1940-44	27,000	800	200	26,000	14,180	11,660	80	80
1945-49	43,000	1,400	200	41,400	20,140	20,520	680	60
1950-54	41,600	0	200	41,400	13,200	28,200	0	0
1955-59	41,200	600	200	40,400	17,080	23,320	0	0
Oregon								
1925-29	35,174	0	738	34,436	34,436	0	0	0
1930-34	43,464	4,810	880	37,774	37,774	0	0	0
1935-39	57,202	1,920	890	54,392	54,336	56	0	0
1940-44	55,748	1,800	930	53,018	51,772	80	0	1,166
1945-49	84,250	1,200	975	82,075	79,280	125	0	2,670
1950-54	75,350	1,575	875	72,900	69,860	50	0	2,990
1955-59	80,750	700	965	79,085	78,735	350	0	0
Washington								
1925-29	20,886	0	1,334	19,552	19,552	0	0	0
1930-34	36,256	2,216	1,706	32,334	31,534	800	0	0
1935-39	52,306	7,168	1,650	43,488	42,153	1,135	200	0
1940-44	41,530	2,784	1,538	37,208	36,002	221	700	285
1945-49	47,670	905	1,505	45,260	42,845	740	1,325	350
1950-54	35,925	0	1,150	34,775	32,250	100	0	2,425
1955-59	37,450	0	595	36,855	35,785	0	0	1,070
Three state total								
1925-29	72,860	0	2,292	70,568	70,568	0	0	0
1930-34	109,320	10,026	2,786	96,508	95,708	800	0	0
1935-39	140,708	10,488	2,740	127,480	125,769	1,471	240	0
1940-44	124,278	5,384	2,668	116,226	101,954	11,961	780	1,531
1945-49	174,920	3,505	2,680	168,735	142,265	21,385	2,005	3,080
1950-54	152,875	1,575	2,225	149,075	115,310	28,350	0	5,415
1955-59	159,400	1,300	1,760	156,340	131,600	23,670	0	1,070

a/ In 1950-59 some quantities processed in different outlets are combined (for one outlet) or are included with fresh sales to avoid disclosure of individual operations.

b/ Other processing includes mostly quantities crushed for spirits.

Source: U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service publications: "Fruits (noncitrus), Production, Farm Disposition, Value, and Utilization of Sales, 1889-1944," (Pub. CS-27), May 1948; "..., 1944-1949," (Stat. Bul. No. 114), October 1952; "..., 1954-1959," (Stat. Bul. No. 292), August 1961.

TABLE 47

Canned Fruits: U. S. Pack of Selected Fruits, by States,^{a/} 1930-60

Year	Apricots		Sweet cherries		Fruit cocktail Calif.	Fruit salad ^{b/} Calif.	Pears		Peaches			Pine-apple d/	Total seven items
	Calif.	Other states	Calif.	Other states			Calif.	Other states	Calif. clings ^{c/}	Calif. frees	Other states		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1,000 cases--basis of 24 No. 2 1/2 cans													
Average													
1930-34	1,991	80	261	383	e/	1,868	1,938	2,545	9,288	124	98	5,100	26,676
1935-39	3,300	73	267	388	2,565	1,310	1,655	3,269	10,753	629	388	9,000	33,597
1940-44	3,542	188	188	648	5,364	414	1,677	3,740	11,204	1,050	1,125	9,087	38,227
1945-49	4,839	179	459	799	7,869	1,025	1,503	3,425	15,414	1,250	1,576	9,040	47,378
1950-54	3,900	67	371	619	8,254	876	2,499	4,131	16,227	2,567	1,257	13,152	53,920
1955-59	4,101	127	315	620	10,858	1,095	4,326	4,309	19,705	4,234	2,137	14,220	66,047
Annual													
1940	1,815	385	87	509	4,361	601	1,532	3,988	9,765	1,134	595	8,660	33,432
1941	4,072	191	147	721	5,107	634	1,792	4,770	10,768	2,152	1,749	8,940	41,043
1942	2,998	251	307	663	5,562	593	1,893	4,042	12,961	1,089	1,976	9,550	41,885
1943	1,125	51	144	738	5,621	75	1,747	2,703	10,203	537	366	9,460	32,770
1944	7,701	64	258	608	6,167	167	1,419	3,199	12,321	339	938	8,823	42,004
1945	3,949	148	509	796	6,035	565	1,475	3,067	12,248	520	1,504	7,553	38,369
1946	10,224	371	573	1,300	7,752	1,292	1,326	4,140	17,445	2,024	2,029	8,012	55,488
1947	3,063	194	289	309	9,386	803	1,459	4,275	15,574	1,497	2,215	8,795	47,859
1948	4,651	116	236	603	9,902	1,096	1,184	2,809	14,802	1,708	1,023	10,420	48,550
1949	2,307	68	688	990	6,269	1,368	2,070	2,834	17,003	1,499	1,110	10,419	46,625
1950	3,661	0	373	368	7,475	678	2,509	3,861	14,653	1,677	511	11,712	47,478
1951	4,538	76	230	670	9,003	979	2,477	4,170	19,448	2,793	897	12,879	58,160
1952	3,905	99	632	663	7,489	817	2,741	3,809	15,136	2,670	1,742	14,614	54,317
1953	4,718	41	358	701	8,228	989	1,596	4,212	17,559	2,580	1,467	13,408	55,857
1954	2,678	118	262	691	9,074	920	3,174	4,601	14,340	3,113	1,667	13,147	53,785
1955	5,782	137	516	861	9,809	1,064	3,366	4,979	18,462	3,007	1,663	14,719	64,365
1956	4,118	33	442	256	11,033	1,182	4,330	4,551	21,722	4,493	2,125	14,554	68,839
1957	4,004	161	349	620	10,638	1,098	4,762	3,806	18,960	4,065	1,330	13,495	63,288
1958	1,718	144	151	810	10,734	876	3,944	3,939	17,897	4,489	2,869	14,165	61,736
1959	4,885	161	118	552	12,074	1,255	5,228	4,271	21,405	5,117	2,699	14,167	72,012
1960	5,949	195	194	435	12,848	1,132	4,652	3,854	21,587	4,876	4,383	15,014	75,119

(Continued on next page.)

Table 47 continued.

- a/ Data reported in equivalent cases of 24 No. 2 1/2 cans for California packs and for U. S. packs since 1944. Packs in "Other states" for earlier years converted to No. 2 1/2 basis from information on pack distribution by can sizes. Packs for "Other states" are differences between U. S. and California packs.
- b/ Includes mixed fruits beginning with 1943; none packed earlier.
- c/ Includes spiced peaches--this pack averaged approximately 130,000 cases in 1936-41; 40,000 in 1942-45; 250,000 in 1946-52; 450,000 in 1953-58; and 670,000 cases in 1959-60.
- d/ Includes Hawaiian and foreign operations of members of Pineapple Growers Association of Hawaii. Packs reported in actual cases before 1944 were converted to No. 2 1/2 basis using a factor of approximately 85 percent.
- e/ Fruit cocktail and fruit salad not segregated and not converted to equivalent 2 1/2 cases. The difference between actual and equivalent cases probably is less than 1 percent in 1930-34.

Source: Cannery League of California, "California Pack Statistics," annual summary issues (for California packs); National Cannery Association, "Canned Food Pack Statistics," annual issues (for U. S. packs).

TABLE 48

California Fruits and Tree Nuts: Production, Acreage, Yield, and Value, 1920-59

Period	Seven deciduous tree fruits ^{a/}								Grapes	Tree nuts ^{b/}
	Apri-cots	Cher-ries	Plums	Apples	Peaches	Pears	Prunes	Total		
1	2	3	4	5	6	7	8	9	10	11
production--1,000 tons (equivalent fresh weight)										
1920-24	142	16	49	196	377	123	288	1,191	1,554	33.1
1925-29	183	15	59	215	485	196	423	1,576	2,144	44.9
1930-34	228	20	67	216	612	238	506	1,887	1,757	50.2
1935-39	251	25	62	199	533	234	570	1,874	2,224	71.8
1940-44	182	22	76	168	650	247	450	1,795	2,452	79.7
1945-49	204	34	80	214	796	325	486	2,139	2,763	104.6
1950-54	183	28	76	195	761	348	393	1,984	2,682	104.5
1955-59	181	25	84	228	862	388	362	2,130	2,728	115.5
bearing acreage--1,000 acres										
1920-24	60	8	22	50	102	37	124	403	376	124
1925-29	78	11	30	51	119	57	161	507	563	157
1930-34	80	14	29	43	110	65	171	512	518	182
1935-39	75	15	26	35	83	54	154	442	496	198
1940-44	68	13	24	31	81	46	139	402	509	206
1945-49	58	11	24	28	81	43	119	364	494	217
1950-54	44	9	23	23	78	39	97	313	468	207
1955-59	37	10	22	23	79	39	85	295	409	208
yield--tons (fresh) per bearing acre										
1920-24	2.4	1.9	2.3	3.9	3.7	3.3	2.3	2.96	4.13	.27
1925-29	2.4	1.4	2.0	4.2	4.1	3.5	2.6	3.11	3.81	.29
1930-34	2.8	1.5	2.3	5.0	5.6	3.7	3.0	3.67	3.39	.28
1935-39	3.4	1.7	2.4	5.7	6.5	4.4	3.7	4.24	4.48	.36
1940-44	2.7	1.7	3.2	5.4	8.0	5.4	3.2	4.47	4.82	.39
1945-49	3.5	3.0	3.4	7.8	9.8	7.5	4.1	5.88	5.59	.48
1950-54	4.2	3.0	3.4	8.4	9.7	8.8	4.0	6.34	5.73	.51
1955-59	4.9	2.6	3.9	9.8	10.8	10.1	4.2	7.22	6.67	.56
farm price--dollars per ton (fresh)										
1920-24	60	161	70	28	39	66	54	47	40	377
1925-29	60	172	61	29	35	53	44	42	22	370
1930-34	34	92	28	16	18	25	25	22	16	218
1935-39	38	112	36	15	24	25	24	25	15	214
1940-44	78	195	81	45	51	59	55	58	43	414
1945-49	87	269	106	49	58	79	75	71	51	466
1950-54	110	298	145	57	64	73	87	79	45	435
1955-59	122	342	135	51	63	73	114	83	52	544
grower returns--dollars per bearing acre										
1920-24	137	306	150	106	146	217	125	142	164	101
1925-29	141	248	112	115	129	180	110	130	85	106
1930-34	88	130	61	80	84	81	72	79	53	60
1935-39	125	171	84	84	149	104	81	107	69	78
1940-44	213	324	256	252	409	326	175	258	207	160
1945-49	295	783	343	369	557	561	305	410	284	224
1950-54	455	854	450	479	622	645	346	493	255	220
1955-59	569	811	512	504	679	732	454	585	345	292

a/ Apple data relate to total crop for 1920-33 and to total crop in commercial counties for 1934-59. Prunes converted at 1 dry ton to 2.5 fresh tons.

b/ Includes production of almonds and walnuts and acreage of almonds, walnuts, and also chestnuts, filberts, and pecans.

Source: California Crop and Livestock Reporting Service, "California Fruit and Nut Crops: Acreage, Production, Utilization and Value, 1909-1955," (Spec. Pub. 261), July 1956, supplemented by later reports

TABLE 49

California Deciduous Fruits and Melons: Annual Rail Carlot Shipments,^{a/} 1925-60

Year	Deciduous tree fruits								Total ^{c/}	Straw-berries ^{d/}	Water-melons	Cantaloupes	Other melons	Grapes
	Apri-cots	Cher-ries	Plums ^{b/}	Nectar-ines	Peaches	Pears	Apples	Mixed decid.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Average														
1925-29	0	905	2,866	0	14,943	9,979	4,264	3,570	36,527	149	5,595	16,399	5,919	69,736
1930-34	0	922	3,399	0	12,743	8,773	3,799	2,314	31,950	343	4,729	10,201	8,409	41,464
1935-39	487 ^{e/}	696	3,235	0	7,260	6,750	2,578	979	21,985	325	3,368	7,314	5,957	32,244
1940-44	469	605	4,055	0	4,682	5,274	1,109	465	16,659	117	3,009	7,388	4,909	28,971
1945-49	711	775	4,176	0	3,458	5,448	1,607	394	16,569	188	2,811	12,681	5,336	30,112
1950-54	549	773	3,742	448 ^{e/}	3,954	5,165	502	319	15,452	1,435	1,921	13,783	5,136	27,657
1955-59	291	607	3,692	913	3,040	4,097	147	413	13,200	2,675	1,203	13,257	4,460	24,960
Annual														
1950	858	1,001	4,049	0	4,551	4,828	539	329	16,155	895	2,380	13,260	4,649	25,702
1951	537	532	4,839	0	3,730	5,030	527	239	15,434	936	2,313	13,556	4,769	29,308
1952	509	897	2,687	0	4,306	6,460	790	279	15,928	1,566	1,281	12,901	5,060	31,010
1953	497	809	3,976	324	3,629	3,563	345	383	13,526	1,760	1,288	13,914	5,459	25,930
1954	344	626	3,160	571	3,553	5,942	307	367	14,870	2,016	2,345	15,283	5,743	26,336
1955	493	913	4,099	678	4,879	3,687	372	511	15,632	1,693	1,598	13,738	5,226	28,865
1956	341	875	4,406	533	2,979	4,277	112	405	13,928	2,461	1,465	12,934	4,999	26,002
1957	330	632	3,603	1,227	3,411	4,567	114	445	14,329	3,550	1,014	14,059	4,070	23,549
1958	92	287	2,555	854	2,057	3,578	81	276	9,780	2,965	687	13,478	3,630	22,958
1959	201	329	3,798	1,273	1,875	4,375	56	427	12,534	2,707	1,252	12,075	4,177	23,424
1960	254	394	3,284	1,450	2,411	3,509	65	501	11,868	2,103	1,206	11,580	4,473	23,343

^{a/} Data include boat shipments and government purchases reduced to carlot equivalents, but exclude truck shipments. Figures for earlier years include large quantities of some processing items because rail movement to processing plants was very important before the development of extensive truck transportation.

^{b/} Includes fresh prunes.

^{c/} Total is sum of averages for commodities shown and excludes small shipments of other deciduous tree fruits.

^{d/} Includes small quantities of other berries: 1932, 4 cars; 1938, 2; 1942, 1; and 1947, 1.

^{e/} Short average. Shipments not collected prior to 1937 for apricots or prior to 1953 for nectarines.

Source: California Federal-State Market News Service, "Rail Carlot Shipments of California and United States Fruit and Vegetables, Averages 1925-29 to 1950-54 and Annual 1930-58," Sacramento, June 1959, and later annual issues.

TABLE 50

California Deciduous Fruits and Melons: Monthly Rail Carlot Shipments,^{a/} 1945-59

Commodity	May ^{b/}	June	July	Aug.	Sept.	Oct.	Later ^{c/}	Total
1	2	3	4	5	6	7	8	9
<u>1945-49 average</u>								
Cherries	373	402	0	0	0	0	0	775
Apricots	32	553	125	1	0	0	0	711
Plums	98	1,618	1,595	769	94	2	0	4,176
Peaches	0	173	1,938	1,219	126	2	0	3,458
Apples	6	15	485	507	166	189	231	1,599
Mixed deciduous	9	115	106	88	43	29	4	394
Pears	0	22	1,432	2,352	1,051	248	289	5,394
Subtotal	518	2,898	5,681	4,936	1,480	470	524	16,507
Strawberries	133	5	7	15	11	15	2	188
Cantaloups	332	4,339	3,182	3,377	1,387	64	0	12,681
Watermelons	44	831	1,165	719	51	1	0	2,811
Other melons	24	828	804	1,418	1,571	647	44	5,336
Grapes	0	290	1,615	3,526	8,551	11,735	4,566	30,283
Total	1,051	9,191	12,454	13,991	13,051	12,932	5,136	67,806
<u>1950-54 average</u>								
Cherries	302	471	0	0	0	0	0	773
Apricots	20	434	95	0	0	0	0	549
Plums	80	1,517	1,328	730	86	1	0	3,742
Peaches	0	257	2,415	1,197	84	1	0	3,954
Nectarines ^{d/}	0	90	244	85	1	0	0	420
Apples	0	3	153	211	50	19	57	493
Mixed deciduous	9	89	116	69	25	11	0	319
Pears	0	8	1,166	2,361	1,066	244	314	5,159
Subtotal	411	2,869	5,517	4,653	1,312	276	371	15,409
Strawberries	666	286	207	110	104	52	10	1,435
Cantaloups	879	2,982	3,703	4,735	1,440	39	5	13,783
Watermelons	104	674	744	378	21	0	0	1,921
Other melons	27	462	531	1,614	1,716	724	62	5,136
Grapes	20	630	1,716	3,022	6,323	9,628	6,380	27,719
Total	2,107	7,903	12,418	14,512	10,916	10,719	6,828	65,403
<u>1955-59 average</u>								
Cherries	191	416	0	0	0	0	0	607
Apricots	22	223	46	0	0	0	0	291
Plums	124	1,386	1,406	694	81	1	0	3,692
Peaches	20	317	1,621	1,013	65	4	0	3,040
Nectarines	183	471	250	9	0	0	0	913
Apples	0	1	43	67	16	8	12	147
Mixed deciduous	10	105	158	111	19	10	0	413
Pears	0	4	832	1,550	1,004	378	234	4,002
Subtotal	550	2,923	4,356	3,444	1,185	401	246	13,105
Strawberries	996	712	483	235	128	60	61	2,675
Cantaloups	317	1,958	4,860	4,214	1,813	92	3	13,257
Watermelons	103	495	415	185	5	0	0	1,203
Other melons	6	254	648	1,643	1,384	520	5	4,460
Grapes	60	660	1,895	2,999	5,544	8,082	5,789	25,029
Total	2,032	7,002	12,657	12,720	10,059	9,155	6,104	59,729

^{a/} Includes boat shipments and government purchases reduced to carlot equivalents but excludes truck shipments.^{b/} Includes April shipments of strawberries and cherries in some years.^{c/} Includes shipments after October for crops produced in years indicated.^{d/} Data not reported before 1953; averages include rough estimates for 1950-52.

Source: California Crop and Livestock Reporting Service and Federal-State Market News Service, "California Carlot Shipments, Fruits and Vegetables," annual issues for 1945-59.

TABLE 51

California Deciduous Fruits and Melons: Truck Shipments, ^{a/} 1945-59

Commodity	Out-of-state ^{b/}		California unloads ^{c/}		
	1951- 1954	1955- 1959	1945- 1949	1950- 1954	1955- 1959
1	2	3	4	5	6
Apricots	97	81	583	461	327
Cherries	44	70	354	243	219
Plums and fresh prunes	458	873	603	692	864
Nectarines	74	390	327	330	634
Peaches	1,167	2,126	3,237	2,815	3,130
Pears	576	767	989	1,244	1,206
Apples	584	678	1,987	1,969	1,900
Other ^{d/}	11	0	286	257	264
Deciduous tree fruits	3,011	4,985	8,366	8,011	8,544
Watermelons	2,328	2,349	2,688	3,134	3,849
Cantaloups	1,870	3,118	3,195	3,703	3,829
Other melons	207	453	985	1,148	1,308
Melons	4,405	5,920	6,868	7,985	8,986
Strawberries		684 ^{e/}	850	1,490	1,559
Other berries			243	197	164
Grapes	3,770	6,663	2,294	2,469	3,274
Total	11,186	18,252	18,621	20,152	22,527

^{a/} Reduced to carlot equivalents.^{b/} Outbound through California border inspection stations. Includes an unknown amount of duplication with truck unloads because many of outbound truck shipments originate in Los Angeles where supplies are secured for the wholesale market. Information not available prior to 1951.^{c/} Truck unloads at Los Angeles, San Francisco, and Oakland. Information not available for truck shipments to other cities.^{d/} Includes figs (fresh), persimmons, pomegranates, and small quantities of loquats and quince.^{e/} Includes small quantities of other berries. Data not available prior to 1955.

Source: California Crop and Livestock Reporting Service and Federal-State Market News Service, "California Carlot Shipments: Fruits and Vegetables," annual issues for 1945-59.